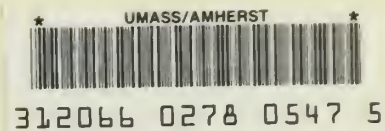


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INDUSTRIAL TRANSITION  
IN MILFORD, 1981-1985

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INDUSTRIAL TRANSITION  
IN MILFORD, 1981-1985

Mature Industries Research Department  
March, 1987



## EXECUTIVE SUMMARY

During the 1980's, the town of Milford in southeastern Worcester county has undergone a two-fold transition in its industrial structure: 1) from manufacturing to trade and services; and 2) within the manufacturing sector, from the non-durable goods such as shoes, apparel, and rubber which historically dominated this sector to durable goods (e.g., instruments and metalworking machinery). Employment has also expanded rapidly over this period, growing four times as fast as private sector employment in Massachusetts overall, and the unemployment rate has declined from above 10% to just over 4%. A small number of firms--many of them new to Milford--have played a major role in both the transition and the process of economic growth. Companies in industries which meet the DES criteria for "high technology" have accounted for approximately one-third of the rise in employment; moreover, high tech will have a growing presence in the town over the next few years.

This study analyzes the character and results of the transition, with particular emphasis on employment issues. Its main objective is to determine if Milford's experience has any implications for communities which are also undergoing change in their economic structures.

The major findings of the study include the following:

- o Most of the net employment growth during the 1980's can be attributed to incoming firms and to a few existing large companies. The growth of new firms has been influenced by Milford's location near Rt. 495 as well as local public policies and initiatives. The most important of these policies and initiatives include 1) the development of a cooperative relationship with incoming companies; 2) the provision of essential infrastructure; and 3) the offer of M.G.L. Chapter 121A tax agreements.
- o The share of production jobs in Milford firms as a whole has fallen, while the proportions of clerical and service jobs, as well as managerial, professional, and technical positions, has increased.
- o Estimated full-time real wages of Milford workers overall have increased at about the same rate as the comparable figure for the state. However, the gap between Milford's lowest- and highest-paying sectors seems to have widened, as sectoral wages have increased at widely differing rates.
- o Over half of the jobs in a sample of incoming and established major growing firms that accounted for more than 50% of 1981-1985 employment growth are in the managerial and professional categories. Only about one-quarter are in production and service jobs. This structure of occupations contrasts with the preponderance of production jobs both in the declining non-durable goods manufacturing sector and in metal forgings and glass, durable goods industries which have declined or stagnated.



- o Although most of the firms in the sample were unable to provide detailed wage information, the occupational distribution within these companies is consistent with large shares of both high- and low-paying jobs, and thus a relatively small number of middle-income employment opportunities.
- o The sample firms draw upon a regional labor market, in part because the qualifications of the Milford labor force do not always meet the skill requirements of the firms. Moreover, many of the workers in the new firms have been transferred from other company locations, and firms increasingly face a tightening local labor market. Hence, only about one-quarter of the employees of these firms are Milford residents.
- o Policies toward training and internal upgrading to fill new jobs differ widely among the firms studied. In general, smaller and relatively independent companies tend to rely more on the training and internal promotion of their existing work forces than large corporations.
- o Employment in some of the sample companies has not been stable. Two of the new firms laid off or transferred a total of over 500 workers in the 1981-1985 period, and these and other firms have lost some additional jobs during 1986. Employment in one of the long-established firms fell by almost 100 during the period due to a variety of factors. Moreover, the firms in the sample expect to create few additional job opportunities over the next few years.
- o According to an emergency assistance center (EAC) which served workers laid off from three firms in Milford, a number of dislocated workers have yet to become reemployed. Many of those who have found new jobs have had to change industries and have experienced wage reductions. Few of these workers have been employed by the new firms or established major growing companies; in fact, most of the reemployed have found jobs outside of the town in industries such as non-electrical machinery, fabricated metal, and health care.
- o Employment of Milford residents has increased rapidly, and there has been an appreciable decline in both the level and rate of unemployment. These developments can be attributed to economic growth in both Milford and the region, since many if not most Milford residents are employed outside of the town.
- o Per capita income in real terms has risen about as fast as the state's per capita income. This also is likely the result of economic expansion in Milford and the region.
- o The transition and process of economic growth have been accompanied by a housing construction boom and a steep rise in housing prices and rents, which have outstripped the rise in per capita income. Most of the new construction has been geared toward middle- and upper-income buyers.







The findings of the study raise a number of issues that may be relevant to policy makers in other communities that are undergoing industrial change. Among the most important of these are the following:

- o The regional context of economic growth: Local economies such as Milford that are integrated into larger regions are strongly influenced by regional economic trends. Hence, there is continued need for coordinated regional development and employment policies.
- o Strategies to create employment for local residents by attracting firms from outside the community: Efforts to generate job opportunities for local residents by attracting firms from the "outside" may be only partially successful. The new firms may transfer much of their existing work forces from other company locations, or there may be a mismatch between the skills of the local labor force and the requirements of employers. Both of these factors played a role in Milford, as only about 20% of the jobs in incoming firms are held by Milfordians. This implies that local policy makers who choose this strategy should attempt to attract firms which can offer new job opportunities for which residents are qualified. This point is particularly important if the goal is to reemploy workers who have been displaced from traditional industries and whose skills may not be easily transferrable to other industries and occupations.
- o The special problems of dislocated workers: In their efforts to find new jobs at comparable wages, workers who have been displaced from "traditional" manufacturing industries may face a variety of barriers including inadequate English proficiency, limited formal education, or non-transferrable skills. In addition, they may be unwilling to seek employment outside of the traditional industries to which many workers have had long-term attachment. Each of these barriers was present in Milford. Thus, for workers to be reabsorbed into growing industries, they must continue to have access to training in both basic and specific job skills as well as to counseling and other services to encourage them to broaden their job search.
- o The risks of over-reliance on a few industries and/or firms: In the attempt to generate local employment, the dependence on a limited number of industries and/or firms may leave a community vulnerable to fluctuations in a few key industries and to production, employment, and location decisions made by a handful of companies. In Milford's case, roughly one-third of the employment in new firms was in companies that depended on the health of the computer industry. The town's recent success in attracting a number of additional new firms from a range of industries will allow Milford to diversify further its industrial base.
- o The tailoring of a local development and employment strategy to local conditions: There is no single approach to economic development and job creation which can be applied uniformly to communities that differ with respect to location, size and



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quality of labor force, resources, and other influences on economic development. Rather, a strategy must be devised that is appropriate to specific local conditions. Of those development factors that are subject to local control, Milford's experience suggests that the most important include the establishment of cooperative relations between local government and company officials and the provision of essential infrastructure, such as roads and water, sewer, and electricity lines. Inducements to firms such as tax relief may also influence company location decisions.



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## INTRODUCTION

Milford is a town of approximately 24,000 people located seven miles south of the intersection of the Massachusetts Turnpike and Route 495 in Worcester County. During the 1980's, Milford has undergone a two-fold transition in its industrial structure. First, non-manufacturing--particularly trade and services--has risen as a share of total private sector employment, while manufacturing has correspondingly fallen. Second, within manufacturing, most of the non-durable goods industries, such as shoes, apparel, and rubber, which historically dominated this sector have stagnated or declined, with their place being taken by producers of durable goods.

The 1980's have been years of rapid economic growth as well as industrial transition. For example, from 1981 to 1985 Milford private sector employment rose four times as fast as private employment overall in the Commonwealth, in large part as a result of the growth of new firms. Over the same period, the town's unemployment rate fell from 10.4% (compared to 6.4% for the Commonwealth) to 4.2%, only slightly above the Massachusetts rate of 3.9%.

This study analyzes the process and results of the transition, with particular emphasis on employment issues. Its main objective is to determine if Milford's experience has any implications for other communities which are also undergoing change in their economic structures. Accordingly, the presentation of the study's findings is organized around the following broad questions:

1. What has been the nature of Milford's economic transition?
2. To what extent can the growth of new firms--which has played an important role in the transition--be attributed to specific local conditions? In particular, what role has been played by local public policies and initiatives in encouraging the development of new businesses?
3. What have been the consequences of the process, especially for workers?
4. Finally, are there any policy implications that can be drawn from the Milford experience and applied to other communities experiencing structural change?

Before proceeding to the first part of the body of this report--a profile of Milford's population--it should be noted that the research was shaped by two basic parameters. First, with the exception of the demographic overview and a discussion of employment trends in manufacturing, the study is confined to the period since 1981. Although the shift within manufacturing began in the mid-1970's, the more fundamental transition among major sectors was not apparent until the 1980's. Hence, the study focuses on this later period.

Second, in order to keep the analysis manageable, the report is limited almost exclusively to the local economy. However, Milford is part of a regional economy, and developments in the region have a significant impact of the town's residents and its work force. Hence, as discussed in the Summary of Findings, the regional dimension of both labor market trends and economic development must be taken into account by local policy makers.



## DEMOGRAPHIC PROFILE

Milford's population was 24,038 in 1985, the latest year for which data were available. From 1980 to 1985, the population grew by 2.7% from its 1980 level of 23,414, or more than five times as fast as the state overall. According to local officials, the town has experienced significant in-migration since 1980. Although migration data on this period are not available, in-migration is estimated to have been 2,201 from 1970 to 1980.

### Race and Ethnicity

Whites comprised 97% of Milford's population at the time of the 1980 Census. However, immigrants--primarily Italians and Portuguese--accounted for 9% of the town's residents, equal to the statewide proportion. Indeed, the foreign-born historically have been an important segment of the town. Living in closely-knit communities, many--3% of Milford's population, at the time of the Census--speak English poorly or not at all. The corresponding figure for Massachusetts was 2%.

### Age

Milford's age profile does not differ markedly from that of the state. In 1980, 64% of the population fell into the primary working age group (16 to 64), and 11% was at least 65 years of age. The statewide shares were 65% and 13%, respectively. In contrast to most of the age brackets, which were approximately equally divided between males and females, women comprised 62% of the sixty-five-and-older category (Exhibit 1).

### Income

Milford's current dollar per capita income in 1983 (the latest year for which data were available) was \$9912, or 94% of state per capita income. As a later section of this report demonstrates, the real income of Milford residents as a whole rose during the 1980's. However, the distribution of income in Milford, as in Massachusetts overall, is highly unequal, according to the 1980 Census. Thirty-seven percent of all households in 1979 had incomes below \$15,000, while 73% were under \$28,000. Seven percent of households had incomes of at least \$40,000.

Among lower-income households, five percent of families and 16% of unrelated individuals fell below the poverty line in 1979. These rates were below the Commonwealth's, particularly for unrelated individuals. Moreover, in 1979, 7% of all families and 28% of unrelated individuals were either poor or "near-poor"; that is, their incomes were less than 125% of the poverty level (Exhibit 2).

### Labor Force

Milford's labor force in 1985 was 12,647. In 1979, according to the Census, 69% of the population 16 years and older was in the labor force. The male labor force participation rate (80%) significantly exceeded the female rate (59%).





# Exhibit 1

## Population and Age Distribution, 1980

### Percent of Population

<u>Age in Years</u>	<u>Number</u>	<u>Milford</u>	<u>Massachusetts</u>
0-15	5,973	26%	22%
16-21	2,239	10	12
22-29	3,113	13	14
30-39	3,789	16	14
40-49	2,182	9	10
50-64	3,543	15	16
65+	2,575	11	13
Total	23,414	100	100
Males	11,153	48%	48%
Females	12,261	52%	52%

Source: U.S. Census, 1980



# Exhibit 2

## Poverty Population, 1979

	<u>Milford</u>	<u>Massachusetts</u>
Families below poverty level		
Number	314	110,038
% of all families	5%	8%
Families with incomes less than 125% of poverty level		
Number	412	151,973
% of all families	7%	11%
Unrelated individuals below poverty level		
Number	381	158,891
% of all unrelated individuals	16%	21%
Unrelated individuals with incomes less than 125% of poverty level		
Number	679	247,574
% of all unrelated individuals	28%	32%

Source: U.S. Census, 1980



The occupational profile of Milford residents in 1980 was similar to that of the state overall. As shown in Exhibit 3, over one-half of Milfordians held "white collar" jobs as sales, clerical, professional, or technical workers, or as managers. Skilled production workers (craftsmen) accounted for 12% of all employment, while semiskilled (operatives) and unskilled (laborers) production workers comprised 19%. The share of employment in service jobs was 13%. In Massachusetts as a whole, professional and technical workers claimed a larger share (19%) of 1980 employment, and semiskilled workers a smaller share (10%). Otherwise, the town's profile mirrored that of the state. Although not shown in the exhibit, women dominated the relatively low-paying clerical, sales, and service occupations, but were underrepresented in the better-paying professional, technical, and managerial spheres.

This occupational profile is not, of course, unique to Milford or to Massachusetts. The high share of employment in white collar occupations, as well as women's disproportionate role in growing low-wage jobs, is characteristic of the nation as well.

### Journey to Work

For those Milfordians 16 years of age or over who reported their place of work in the 1980 Census, 64% were employed outside of Milford, primarily in nearby communities within the Boston labor market area. As will be discussed later, this has implications for analyzing the effects of the town's economic transition on Milford residents. The corresponding state figure was 58%.

Fifty-six percent of those reporting travel-to-work times took at least twenty minutes, and 14% traveled for at least 45 minutes. Nineteen percent, however, required less than 10 minutes to get to work. As the availability of local public transportation is quite limited, access to private automobiles is necessary for most workers (Exhibit 4).



### Exhibit 3

#### Occupational Distribution of Residents, 1980

	<u>Milford</u>	<u>Massachusetts</u>
Managers	11%	11%
Professional, Technical and Kindred Workers	15	19
Craft Workers	12	11
Operatives	16	10
Laborers	3	4
Sales Workers	8	9
Clerical Workers	18	19
Transportation Workers	3	3
Service Workers	13	13
All Occupational Groups	100%	100%

Source: U.S. Census, 1980





## Exhibit 4

### Journey to Work, 1980

<u>Place of Work</u>	<u>Milford</u>	<u>Massachusetts</u>
City/town of residence	36%	42%
Outside city/town of residence	64%	58%

<u>Travel-to-Work Time</u>	<u>Milford</u>	<u>Massachusetts</u>
Less than 10 minutes	19%	17%
20 minutes or more	56%	48%
45 minutes or more	14%	11%

Source: U.S. Census, 1980



## THE NATURE OF THE TRANSITION

As noted in the Introduction, during the 1980's Milford's structure of production and employment has undergone significant shifts among major industry sectors. This part of the study describes the transition in some detail by discussing employment trends in these sectors.

Exhibit 5 shows the distribution of employment in Milford by major industrial sector for 1981 and 1985. The former year was a state cyclical employment<sup>1</sup> peak, while 1985 is the latest year for which annual data are available. The data indicate that, as employment grew over the 1981-1985 period, significant shifts in the distribution of employment occurred among manufacturing, trade, and services, as well as within manufacturing itself. Moreover, trade and services accounted for the lion's share of the increase in the number of jobs during the period.

Specific findings from the data include the following:

1. Milford private sector employment rose by 51% (3,194 jobs) from 1981 to 1985, in large part as the result of an influx of new firms. (See the following section of this report, "The Growth of New Firms.") This compares with a growth rate of 12% for Massachusetts private sector employment for the same years.
2. For the period under analysis, the manufacturing sector grew by only 4% (120 jobs) overall. Durable goods, mainly optical instruments and metal-working machinery, accounted for all of the net growth, as this branch added 438 jobs (a 28% increase). Employment in non-durables--primarily the footwear, apparel, and rubber industries--continued a decline which has<sup>2</sup> taken place since at least the mid-1970's, falling by 53%, or 318 jobs.
3. Employment in trade, on the other hand, rose by about 80%, and accounted for almost half of the increase in private sector jobs. The expansion in this sector was shared almost equally between wholesale and retail trade, unlike the Commonwealth overall, in which the retail branch has generated the bulk of the new jobs in trade. The growth rate of the service sector was somewhat greater than that of trade; at 86%, it was responsible for four of every 10 new private sector jobs.
4. Finally, the distribution of employment shifted toward non-manufacturing, as the manufacturing sector experienced slow net job growth over the period. While the share of manufacturing fell by 10 percentage points, the proportions of trade and services each rose by six percentage points.

### Trends in Specific Industries

The growth and decline of specific industries underlie these sectoral trends. Unfortunately, due to the confidentiality of much of the relevant data, employment changes in specific industries cannot always be presented. Instead, the discussion proceeds in terms of groups of industries.

With this in mind, Exhibits 6 and 7 highlight the industries that have played significant roles in the growth in trade and services outlined above.



# Exhibit 5

## Distribution of Milford Private Sector Employment, 1981 and 1985

<u>Sector</u>	<u>Empl.</u> <u>1981</u>	<u>% of</u> <u>Total</u> <u>Pvt.</u>	<u>Empl.</u> <u>1985</u>	<u>% of</u> <u>Total</u> <u>Pvt.</u>	<u>Change in Employment</u> <u>1981-1985</u>	
					<u>Absolute</u>	<u>% of Pvt. Change</u>
Agriculture	8	*	18%	*	10	*
Construction	104	2%	239	3	135	4%
Manufacturing	2,171	34	2,291	24	120	4
Transportation, Communication and Public Utilities	312	5	335	4	23	*
Wholesale Trade	84	1	779	8	695	22
Retail Trade	1,793	28	2,563	27	770	24
Finance, Insurance, and Real Estate	339	5	447	5	138	4
Services	1,508	24	2,810	30	1,302	41
Total Private	6,318	100	9,512	100	3,194	100

\*Less than 1%

Columns may not add to 100% due to rounding.

Source: Division of Employment Security, ES-202 reports





# Exhibit 6

## Employment in Major Milford Retail Trade Industries, 1981 and 1985

<u>Industry</u>	<u>Empl.</u> <u>1981</u>	<u>% of</u> <u>Total</u> <u>Retail</u>	<u>Empl.</u> <u>1985</u>	<u>% of</u> <u>Total</u> <u>Retail</u>	<u>Change in Employment</u> <u>1981-1985</u>	
					<u>Absolute</u>	<u>% of Retail Change</u>
Eating and Drinking Places	360	20%	705	28%	375	45%
Grocery Stores	506	28	600	23	94	12
Department Stores	284	16	C	C	C	C
Drug and Proprietary Stores	C	C	C	C	C	C
New and Used Car Dealers	81	5	114	4	33	4
Total	1,324	74	1,971	77	647	84
Total Retail Trade	1,793	100	2,563	100	770	100

C--Confidential

Source: Division of Employment Security, ES-202 reports



# Exhibit 7

## Employment in Major Milford Service Industries,\* 1981 and 1985

	<u>Empl.</u> <u>1981</u>	<u>% of</u> <u>Total</u> <u>Serv.</u>	<u>Empl.</u> <u>1985</u>	<u>% of</u> <u>Total</u> <u>Serv.</u>	<u>Change in Employment</u> <u>1981-1985</u>	
					<u>Absolute</u>	<u>% of Serv. Change</u>
Total	939	62	2,080	74	1,141	88
Total Services	1,508	100	2,810	100	1,302	100

\*Includes hospitals; computer and data processing services; health and allied services; physicians offices; individual and family services; and nursing and personal care facilities. Employment data for these individual industries are confidential.

Source: Division of Employment Security, ES-202 reports



Because structural change within manufacturing has been one of the defining characteristics of Milford's economic transition, this sector is discussed separately.

In 1985, retail trade accounted for three-quarters of overall trade sector employment. Close to 80% of retail employment was in five industries: eating and drinking places; grocery stores; department stores; drug and proprietary stores; and automobile dealers. These industries were also responsible for over 80% of retail job growth from 1981 to 1985; almost half of the growth can be attributed to eating and drinking places alone (Exhibit 6). In wholesale trade, machinery, equipment, and supplies comprised 85% of employment in 1985 and accounted for well over 80% of employment expansion in the 1981-1985 period.

Turning to the service sector, Exhibit 7 shows that almost 75% of employment is in six industries: computer and data processing services; hospitals; individual and family services; health and allied services; physicians offices; and nursing homes. Hospitals and computer/data processing services comprised slightly over one-half of this sector. From 1981 to 1985, although nursing home employment was almost constant, the remaining five industries accounted for over 80% of service sector growth. Computer/data processing services made up approximately 50% of the total.

As noted previously, since at least the mid-1970's Milford manufacturing has been marked by the decline--or, in some cases, the demise--of the non-durable goods industries which historically were the foundation of this sector, and the rise of durable goods production. These developments are illustrated by the data in Exhibit 8. Because the shift to durable goods during the 1980's is the continuation of a longer-run trend, employment levels for 1974 are presented as well as the 1981 and 1985 figures.

The data reveal that while non-durables comprised almost two-thirds of manufacturing employment in 1974, their share had fallen by more than half to just under 30% by 1981. Conversely, the corresponding share for durable goods had risen from 35% to 72%. Moreover, employment in non-durables also fell in absolute terms--by 217 jobs--from 1974 to 1981. This process accelerated during the 1980's: the proportion of manufacturing employment in non-durables declined to a mere 12% by 1985, as these industries lost an additional 318 jobs. Accordingly, durable goods employment, which rose by 1,123 and 438 over the 1974-1981 and 1981-1985 periods, respectively, accounted for all of the net growth in manufacturing in both phases.

What have been Milford's major declining and growing manufacturing industries since 1974? In that year, shoes, apparel, and rubber comprised over 80% of non-durable goods employment. By 1981, jobs in these industries taken together had fallen by almost one-quarter, and in 1985, the shoe and apparel firms went out of business. Regarding durable goods, in both the 1974-1981 and 1981-1985 phases, over three-quarters of the job growth can be attributed to instruments production, and almost the entire increase is due to the expansion of the instruments and metalworking machinery industries. With respect to declining durable goods industries, metal stampings and forgings, an important employer in 1974, had all but disappeared by 1985. Another major employer, pressed and blown glass, laid off approximately 100 workers in 1985, but its employment had apparently stabilized by the end of the year, and it recalled all available laid-off workers in August, 1986.



Exhibit 8

Employment in Milford Manufacturing Industries, 1974, 1981, and 1985

Industry	Empl. 1974	% of Mfg.	Empl. 1981	% of Mfg.	Empl. 1985	% of Mfg.	Employment Change 1974 - 1981		Employment Change 1981 - 1985	
							Absolute	% of Mfg. Change	Absolute	% of Mfg. Change
Durable Goods (SIC's 24, 25, 32-39)	445	35	1,568	72	2,006	88	1,123	124	438	365
Non-Durable Goods (SIC's 20-23, 26-31)	820	65	603	28	285	12	-217	--	-318	--
Total Manufacturing	1,265	100	2,171	100	2,291	100	906	100	120	100

Source: Division of Employment Security, ES-202 reports





## The Role of High Technology

High technology industries--defined in a DES study of the Commonwealth's high tech sector as industries with "above-average shares of technical staff and R&D budgets"<sup>5</sup>--have played a particularly important role in Milford's transition. Indeed, the attraction of high tech employment to offset jobs lost in "mature" industries is one strategy for community economic adjustment. Lowell, a former mill town that is now an important site for industries such as computers, guided missiles and space vehicles, and electronic components, is perhaps the community that has most successfully adopted this approach. High tech industries have also been crucial to overall Massachusetts employment growth over the past decade: according to the DES study just cited, approximately one-quarter of the state's job creation from 1976 to 1984 was by high tech firms.

Under the DES definition, nearly 2,000 workers, or one-fifth of Milford's private sector employment, were in high tech industries in 1985, primarily optical instruments and lenses manufacturing and computer and data processing services. During the 1981-1985 period, employment in high tech rose by over 1,000, and comprised one-third of private sector employment growth. Although the town's largest high tech firm, Waters Chromatography, began in Milford in the mid-1970s, Data General established a facility in Milford in the early 1980's, as the local government<sup>6</sup> sought to attract firms from outside the town in order to generate new jobs. The influx of high tech firms will apparently continue in 1987, as Prime Computer transfers 500 workers from its Framingham and Natick operations to Milford, Fenwal Electronics sets up an electronics assembly plant which will employ an estimated 350 to 400 workers, and the Engelhard Corporation establishes a facility manufacturing circuits for microelectronics staffed by approximately 50 employees.



## THE GROWTH OF NEW FIRMS

With the closing in 1979 of Draper Looms, a manufacturer of textile machinery in neighboring Hopedale, an estimated 3,000 Milford residents were displaced. The closing occurred in the context of decline and stagnation among several of Milford's major non-durable goods manufacturing firms. In an attempt to offset these job losses, Milford public officials responded to the closing by undertaking a sustained effort to attract companies from outside the town. That effort has been successful; indeed, the relocation or expansion of firms originally outside of Milford, along with the establishment of new firms, accounted for over one-half of net private job growth during the 1981-1985 period. Why have firms chosen to locate in Milford?

This question was asked of local officials, real estate developers, and representatives of major manufacturing, trade, and service firms which have set up new facilities in the 1980's. For purposes of analysis, their responses can be grouped into two broad categories: 1) characteristics of Milford and the surrounding area that are largely independent of public policy; and 2) local government measures aimed at improving the local business climate. The most important factors in each category are discussed below.

### Characteristics of Milford

Milford's proximity to Rt. 495 was cited by almost all of the officials and firms as a major selling point to companies seeking production or non-manufacturing sites. The highway gives firms access to the Boston, Worcester, and Providence regions, including the airports located in these areas. Development along Rt. 128, the Massachusetts Turnpike, and even some areas along Rt. 495 north of Milford has raised the price of land and limited its availability; as an alternative, firms have turned to the towns along Rt. 495 in Milford's proximity. Indeed, the relatively low price of land in the Milford area was cited by several firms and by local officials as an additional magnet drawing companies to the town. According to one developer who has been active in Milford, although local land prices have increased dramatically over the past five years, at roughly \$40,000 per acre, industrial land is still cheaper than in many other locations.

Although the quality of the labor force in Milford (and its neighboring towns) was stressed by several public officials as another important attraction to "outside" firms, it was not given significant weight by company respondents, perhaps because a sizable share of employment by new firms has resulted from the transfer of employees in existing facilities located elsewhere. The low level of unionization of the Milford work force was also not viewed as an important consideration. Nor was Milford's wage level considered a major inducement by the company respondents, even though 1985 average full-time weekly wages in the town's private sector (\$354 in current dollars) was 14% below the comparable statewide figure of \$413. Finally, although the "quality of life" in Milford--the level of public



services, local educational opportunities, cultural activities, and so on--was considered by most private and public sector respondents to be another of the town's positive characteristics, it also played a very limited role in location decisions.

### Public Policies

Turning to the impact of public policies and initiatives, three major factors were stressed by almost all of those interviewed:

- o the "cooperative" and "pro-business" attitude of the town government;
- o the presence of essential infrastructure, such as water and sewer lines, and the willingness of the town to extend and/or improve the infrastructure when and where necessary; and
- o the possibility of firms entering into M.G.L. Chapter 121A tax agreements with the town, thereby reducing their local tax burden.

### Business-Government Relations

With regard to the attitude of local officials, company representatives were almost unanimous in their praise of Milford's aggressive pursuit of new business. Several emphasized that Milford had been one of the few towns in the area to initiate contact with firms seeking new sites; other towns apparently waited for firms to come to them. Indeed, the town actively "courted" firms, "leading them by the hand," in the words of one former local official, through the planning and negotiation processes. One employer stressed the absence of "bureaucratic red tape" and the fact that the town acted quickly without constantly having to be prodded. Others mentioned the offer of town officials to assist in arranging local financing. In the words of several company representatives and Milford officials, "partnership" was the term that best describes the relationship between business and local government in Milford.

### Infrastructure

The availability of water and sewer lines, electricity, and other aspects of physical infrastructure, according to the interviews, was another of Milford's major selling points. In fact, in the opinion of one prominent developer, the infrastructure--in particular, the sewer system--is "what has made development work" in the town. Milford recently undertook a \$14 million expansion of its existing sewage treatment plant, more than doubling its capacity, and thereby removing a possible barrier to continued growth. In addition, utilities have been extended to all industrial areas, and two roads have been constructed or extended to improve access to two major industrial parks. The town is currently seeking state funds to aid in the construction of a third road. Indeed, most of the infrastructural improvements have been financed by the state or federal governments. Just under \$1 million in road construction funds was received from the Massachusetts Department of Public Works, and the town expects to receive an





additional \$450,000 in federal road construction monies. The state also provided a \$490,000 grant to improve downtown parking areas. Almost \$13 million in state and federal funds were given to Milford to expand the sewage treatment facility.

## Chapter 121A Agreements

Perhaps the most innovative component of Milford's strategy to attract outside firms has been the use of M.G.L. Chapter 121A tax agreements to encourage the development of "blighted open areas" by exempting them from local property taxes. Under the terms of 121A agreements--which are for a maximum of 15 years (renewable for up to 40 years) and are subject to state approval--in lieu of property tax a 121A firm pays an excise tax to the state equal to the sum of the following: 1) 1% of the assessed value (specified in the agreement) of its local real property; and 2) 5% of the facility's gross income. The excise tax payment is returned in full to the city or town as part of its local aid distribution; moreover, since a 121A parcel is exempt from property taxes, its market value does not enter into the calculation of the Proposition 2-1/2 property tax limit.

In addition to the excise tax, Milford firms subject to 121A agreements must, under certain conditions, make annual payments directly to the town. Through 1985, however, Milford's receipts from 121A firms consisted entirely of the excise taxes. For that year, these receipts amounted to over \$350,000, or approximately 4% of the town's property tax revenues.

Historically, Chapter 121A agreements have been used primarily to spur commercial development. (Boston's Prudential Center complex, for example, was constructed under a 121A.) Milford was one of the first communities to use such arrangements as incentives for industrial firms--an approach which originated with Marie Parente, formerly a Milford selectwoman and at present the town's representative in the Massachusetts House of Representatives.

To date, 121A agreements are in effect with seven firms: Data General, the computer manufacturer whose field engineering headquarters was established in the town in 1983; Dennison Computer Supplies (now Dennison-Carter), which until recently made computer floppy disks and which now produces paper products; Boston Digital Corporation, a manufacturer of computer-controlled machine tools; Photofabrication Engineering Inc. (PEI), which does chemical machining of precision and decorative metal parts; a Columbia Electronics warehouse; Engelhard Industries, a producer of circuits for microelectronics, which is coming to Milford in early 1987; and the Milford Sheraton Hotel. An eighth agreement was being negotiated as this report was being prepared for publication.

Representatives from five of these firms were interviewed as part of this study. Though each respondent cited the town's offer of a 121A agreement as an important inducement to locate in Milford, 121A's were not the determining factor in the location decision. Rather, they were one of several considerations. Moreover, it was not possible to ascertain from the interviews whether any of the firms would have chosen not to come to Milford had 121A's been unavailable.





It should be noted that four of the 121A agreements require the firms to make a "good faith effort" to hire as many Milford residents as possible--a significant provision given that job creation for the local population is a major objective of the town's development efforts. Thus, an important question regarding the use of 121A's is the extent to which the firms involved employ Milfordians. This issue is addressed in a later section which examines the nature of employment in a sample of new and established growing Milford firms. Another major consideration is whether the town has forgone revenue it might otherwise have gained if 121A's had not been used. Although this is an important issue, it cannot be addressed without a good deal of speculation. As already mentioned, it could not be determined if the 121A firms would have refused to locate in Milford without the agreements. Nor is it possible to say whether without 121A's the town could have attracted other companies to the sites that are currently exempt from local property taxes. Hence, the question must remain unanswered.



## CONSEQUENCES OF THE TRANSITION

The previous sections of this report have examined the nature of the shift in Milford's industrial structure that has taken place during the 1980's. This section discusses some of the consequences of that transition for workers who are employed in the town's business establishments as well as for Milford residents.

The distinction between workers in Milford and Milford residents is significant. As noted earlier, according to the 1980 Census, approximately two-thirds of the town's residents are employed in other communities, while an undetermined number of the employees of Milford firms live elsewhere. Hence, the direct effects of industrial change on the local population may have been more limited than suggested by employment data alone. Similarly, as emphasized in the Introduction, the economic welfare of Milford residents is to an important extent determined by developments outside the town.

With this distinction in mind, the following topics are addressed under the rubric of effects on Milford workers: wages; the occupational distribution of employment; the nature of jobs in new and established growing firms; and the post-layoff experience of workers who have been displaced from declining industries. Regarding Milford residents, the issues discussed include employment and unemployment; income; and housing. Where appropriate, comparisons with state-wide trends are presented as part of the analysis.

### Milford Workers

#### Wages

How has the dual shift in Milford's industrial base affected both the level and distribution of wages? In answering this question, several preliminary comments are in order. First, during the 1981-1985 period, a small number of firms accounted for much of the employment growth in manufacturing, wholesale trade, and services, and thus had significant impact on sectoral wage trends. Second, retail trade and services employ relatively high proportions of part-time workers; therefore, for purposes of intersectoral comparison, sectoral wage estimates are presented for full-time workers only. The other side of the coin is that the data do not reveal anything about the weekly earnings of the large numbers of part-time workers in these two sectors.

With these caveats in mind, Exhibit 9 gives estimates of average full-time weekly wages in 1985 dollars by major industry sector for 1981 and 1985.<sup>10</sup> Overall private sector real wages rose by 8% from 1981 to 1985, somewhat below the corresponding statewide figure (10%). The greatest increases in real wages occurred in wholesale trade (39%) and services (32%).

Manufacturing wages rose by only 4%; indeed, real wages in durable goods actually fell by 6%. Surprisingly, wages in the steadily-declining



# Exhibit 9

## Estimated Average Full-Time Weekly Wages by Industry Sector, 1981 and 1985, in 1985 Dollars

<u>Sector*</u>	<u>1981</u>	<u>1985</u>	<u>Percent change 1981-1985</u>
Construction	336	378	12%
Manufacturing	440	454	3
Durables	484	455	-6
Non-Durables	323	427	32
Transportation, Communication, and Public Utilities	404	398	-1
Wholesale Trade	289	402	39
Retail Trade	206	209	1
Finance, Insurance, and Real Estate	312	339	9
Services	290	384	32
 Total Private	 326	 353	 8
 Total Private, Massachusetts	 376	 413	 10

\*Estimates could not be produced for Agriculture.

Source: Estimated from data in Division of Employment Security,  
ES-202 reports and U.S. Bureau of Labor Statistics,  
Employment and Earnings



non-durable goods branch grew as rapidly (32%) as service sector wages. Wages in the remaining major sector, retail trade, increased only negligibly (1%).

Underlying these trends has been the growth or decline of a handful of major Milford firms. A relatively high-wage computer company which is a large wholesale trade and services employer was not present in Milford until the early 1980's; much of the real wage increase in these two sectors can be attributed to this firm. The rapid rise in non-durable manufacturing wages can be traced to the demise of a shoe manufacturer--traditionally Milford's largest non-durable goods producer--which paid very low wages.

The real wage decline in durable goods cannot be explained in the same fashion, as the instruments producer which dominates this branch has grown steadily since the mid-1970's. Money wages in durable goods industries rose by only 12% during the period, less than half the rate for the private sector overall; consequently, they failed to keep pace with a rise in consumer prices of 19%. Unfortunately, existing data cannot explain the lag in money wages.

It is also useful to examine how Milford workers fared relative to Massachusetts private sector workers as a whole from 1981 to 1985. The record in this respect is mixed. As noted previously, the growth in private sector real wages was somewhat below the corresponding statewide figure (10%). With respect to particular sectors, wage growth in Milford manufacturing lagged well behind the state's manufacturing (13%). However, wages in Milford's wholesale trade and service sectors--which accounted for 65% of the town's employment growth in the 1981-85 period--increased at three to four times the rate of these sectors (9% and 11%, respectively) at the state level.

Finally, the large wage increases in wholesale trade and services in Milford, combined with minimal earnings growth in retail trade and manufacturing, has had important consequences for the distribution of wages among the town's industrial sectors (Exhibit 10.) In 1981, average real wages in four sectors--wholesale and retail trade; services; and finance, insurance, and real estate--were below the Milford private sector mean. These sectors accounted for almost 60% of private employment. By 1985, real wages in wholesale trade and services had risen to 113% and 109% of the mean, respectively. On the other hand, wages in retail trade (over one-quarter of 1985-private employment) had fallen even further in relation to the mean, from 63% to 59%.

Regarding the higher-wage sectors, in 1981 manufacturing and transportation, communications, and public utilities (39% of 1981 private employment) offered wages at least 20% above the private sector mean. In 1985, this was still true only for manufacturing, which accounted for roughly one-quarter of employment. Although it remained the highest-paying sector, average real wages in manufacturing had fallen relatively over the 1981-1985 period from 135% to 129% of the private sector mean.

Thus, while real wages of Milford workers overall rose by 9% from 1981 to 1985, the experiences of workers in different sectors varied significantly. The relative wages of workers in wholesale trade and services--two of the town's lowest-paying sectors in 1981--greatly





# Exhibit 10

## Average Full-Time Weekly Wages by Industry Sector in Relation to Average Private Sector Wage, 1981 and 1985

### Average Wages as Percent of Milford Private Sector Mean

<u>Sector*</u>	<u>1981</u>	<u>1985</u>
Construction	103%	107%
Manufacturing	135	129
Durables	148	129
Non-Durables	99	121
Transportation, Communication, and Public Utilities	124	113
Wholesale Trade	89	114
Retail Trade	63	59
Finance, Insurance, and Real Estate	96	96
Services	89	109

\*Estimates could not be produced for Agriculture

Source: Estimated from data in Division of Employment Security,  
ES-202 reports and U.S. Bureau of Labor Statistics,  
Employment and Earnings.



improved during the period. However, workers in the remaining major low-paying sector (retail trade) experienced a relative wage decline, as did workers in manufacturing and transportation, communications, and public utilities, the two highest-paying sectors at the beginning of the period.

### Occupations

The shift in the composition of Milford's private sector employment during the 1980's has brought about a corresponding change in the town's occupational structure (Exhibit 11).<sup>11</sup> Due to the growth of the service sector, for example, managerial, professional and technical employment, on the one hand, and clerical and service jobs, on the other, have assumed increasing importance. The retail trade sector has also contributed to the increasing share of service jobs. Surprisingly the share of sales jobs has fallen in this sector and, as a result, in the local economy. The reverse side of these changes has been a declining share of production workers (Exhibit 12).

The importance of particular service sector industries helps to account for the new occupational profile. Computer and data processing services, hospitals, and individual and family services dominated service employment in 1985 and were responsible for most of the employment growth in this sector from 1981 to 1985. The dependence of these industries on managerial, technical, and professional employment, according to 1980 Census data, is much greater than that of the state's service sector generally or of the Massachusetts economy as a whole (Exhibits 13 and 14).

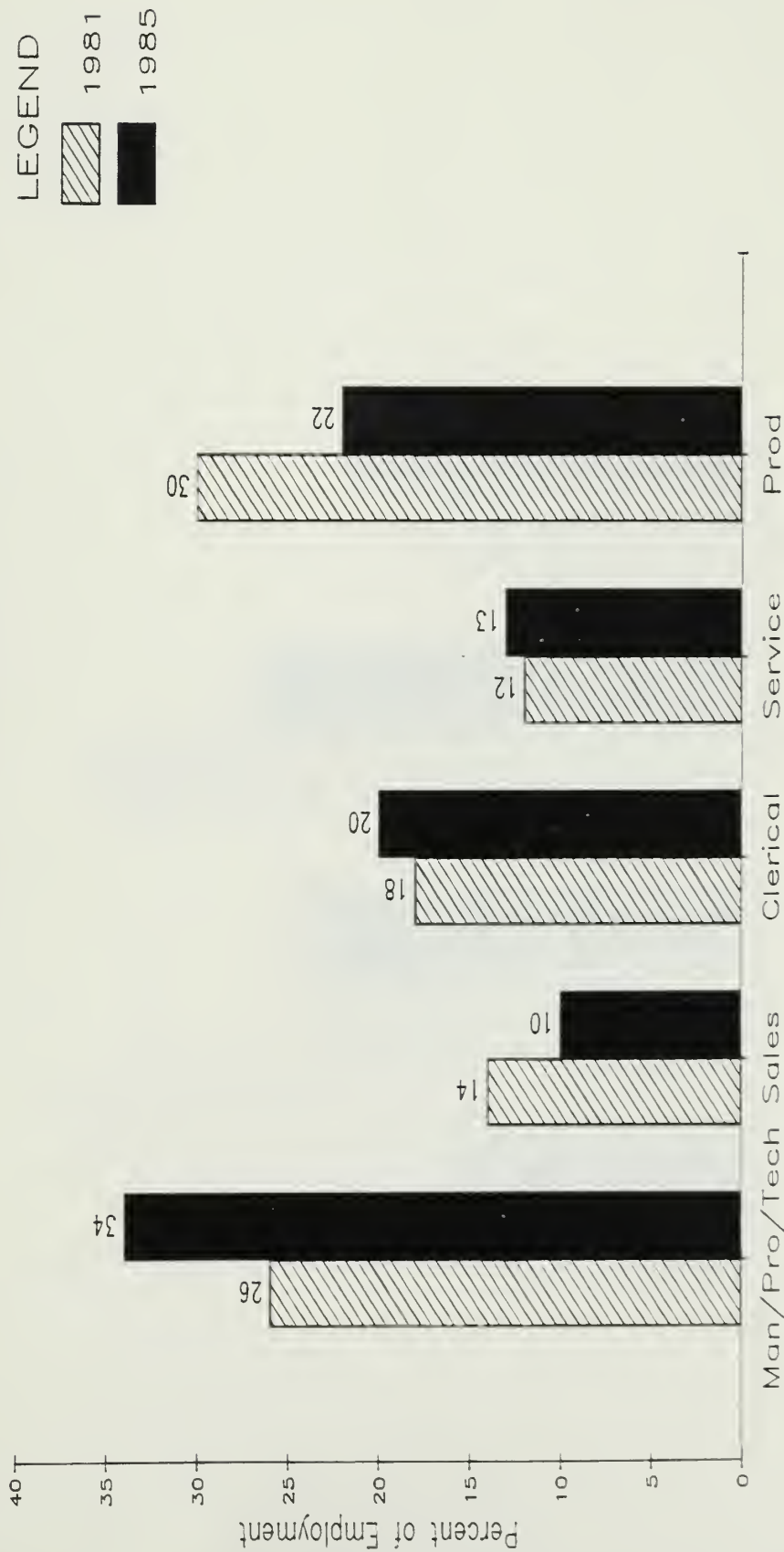
The changes in Milford's occupational structure, however, are not rooted solely in the growth of the service or trade sectors. Manufacturing has undergone similar changes as the structure of production has shifted from non-durable to durable goods. While employment in this sector during the 1981-1985 period increased by only 4%, jobs for managers, professionals, and technicians assumed increasing importance, while the share of production and clerical employment fell (Exhibit 15). This development was a product of the stagnation or decline of industries such as apparel, shoes, rubber, and glass, and the increased importance of instruments. As shown in Exhibit 16, these latter industries rely to a greater extent on managerial, professional, and technical labor than the "traditional" industries, where employment was dominated by production workers. Instruments production meets the DES definition of a "high technology" industry, while the manufacture of computer-controlled machine tools (a key part of Milford's metalworking machinery industry) incorporates computer technology, even though the industry is not characterized by relatively high shares of technical staff and R&D expenditures.

### The Nature of New Employment

Most of the increase in employment in Milford's private sector during the 1980's has been generated either by firms that entered Milford after 1981 or by a few major established companies. In order to gain insight into the nature of new jobs, this part of the report examines employment in a



# Exhibit 11 Change in Milford Occupational Distribution 1981-1985

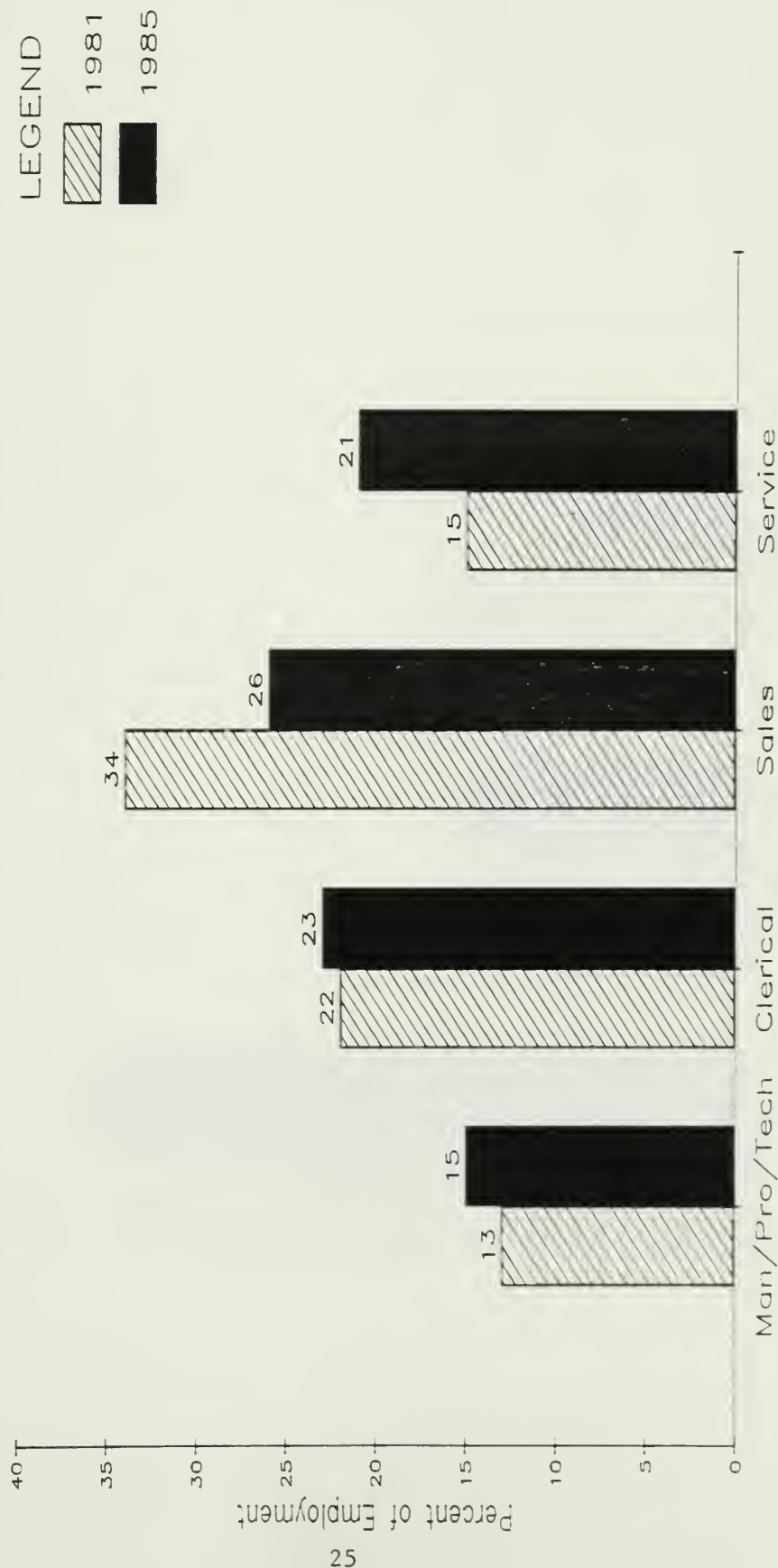


Source: Estimated from data in 1980 U.S. Census and DES, Occupational Employment Statistics survey and ES-202 reports.

\* See Appendix for listing of jobs included in occupational categories.



# Occupational Shifts in Milford Retail Trade 1981-1985

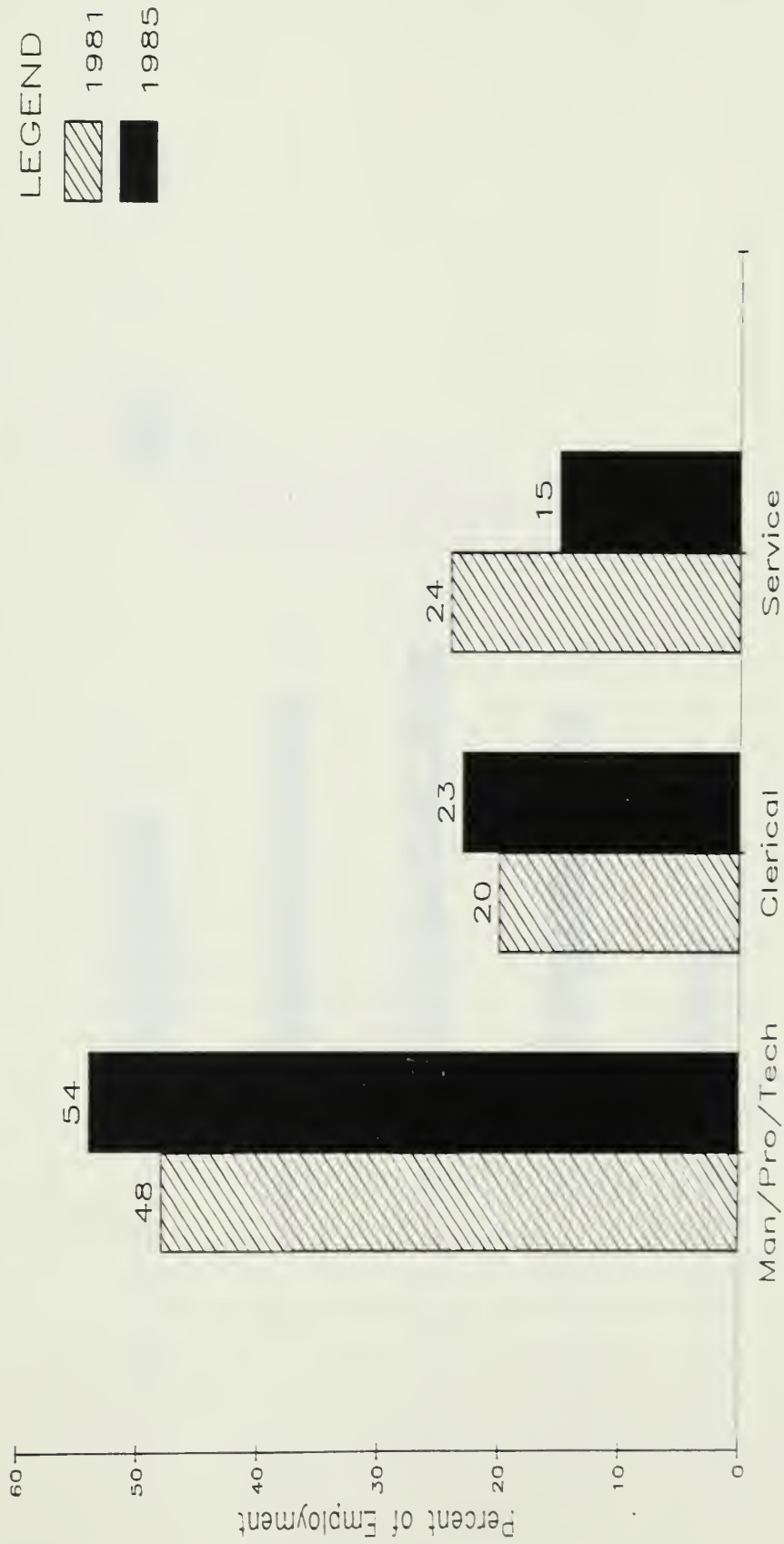


Source: Estimated from data in 1980 U.S. Census and DES, Occupational Employment Statistics survey and ES-202 reports.





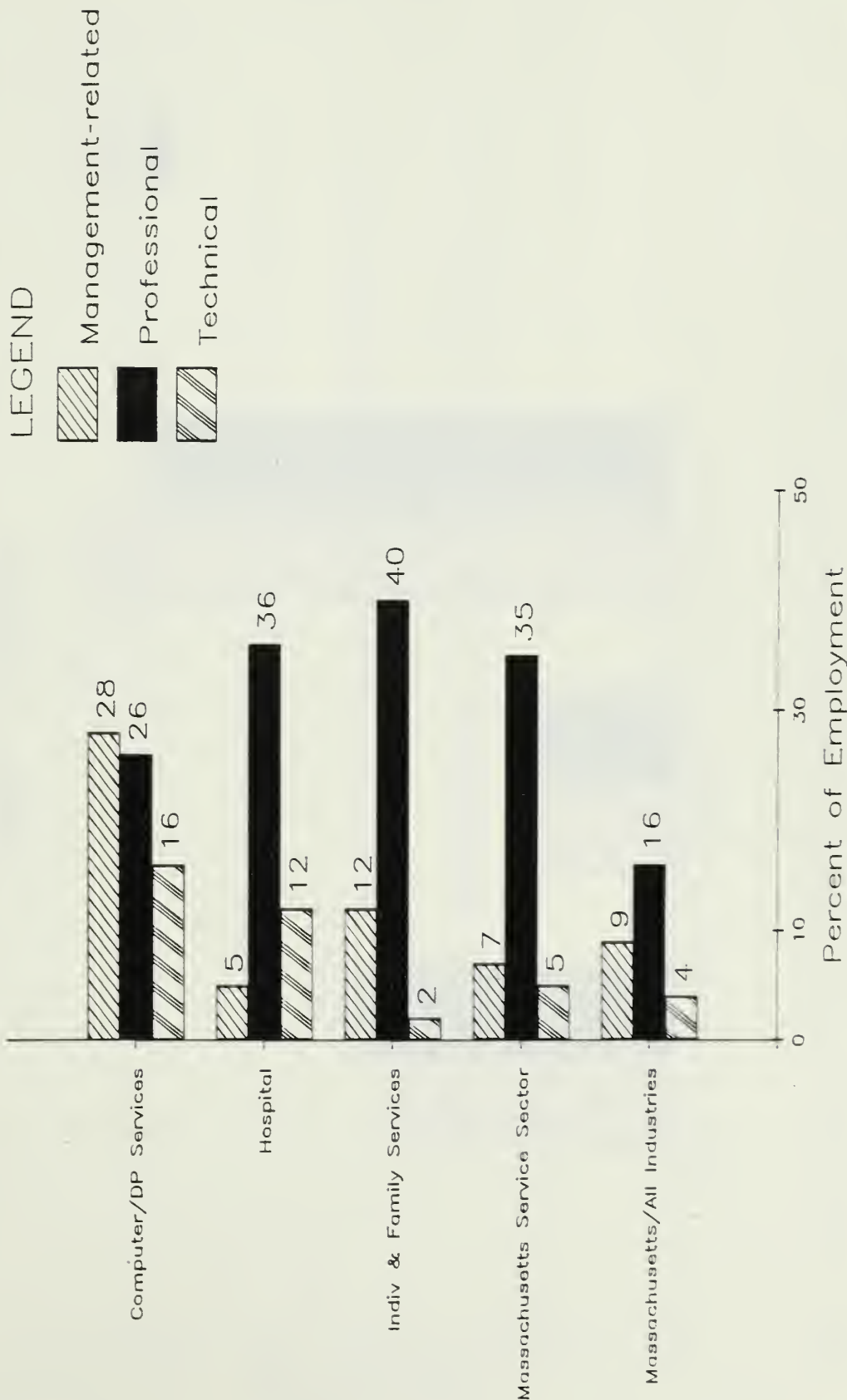
# Occupational Shifts in Milford's Service Sector 1981-1985



Source: Estimated from data in 1980 U.S. Census and DES, Occupational Employment Statistics survey and ES-202 reports.



# Occupational Distribution in Computer/Data Processing, Hospital and Individual and Family Services Sectors

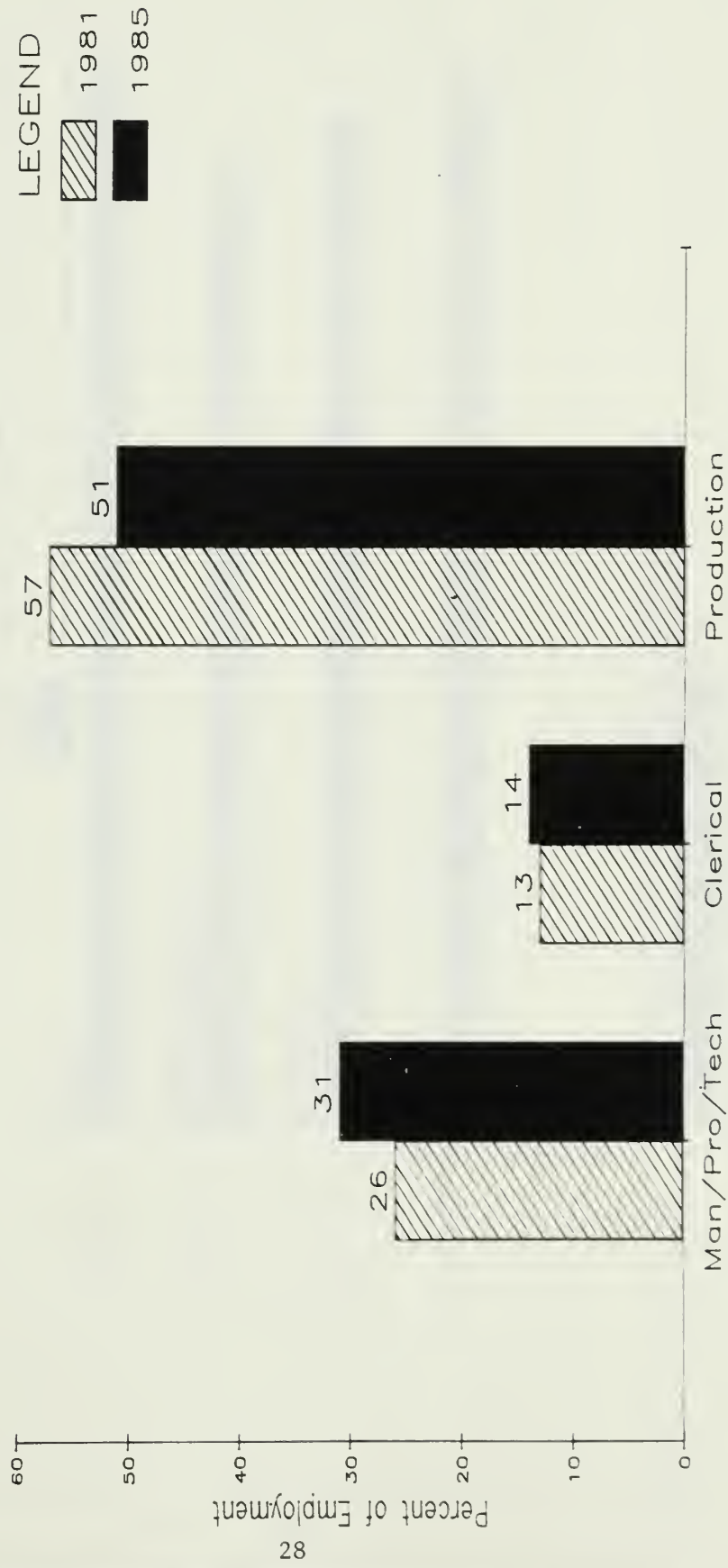


Source: 1980 U.S. Census and DES, Occupational Employment Statistics Survey



Exhibit 15

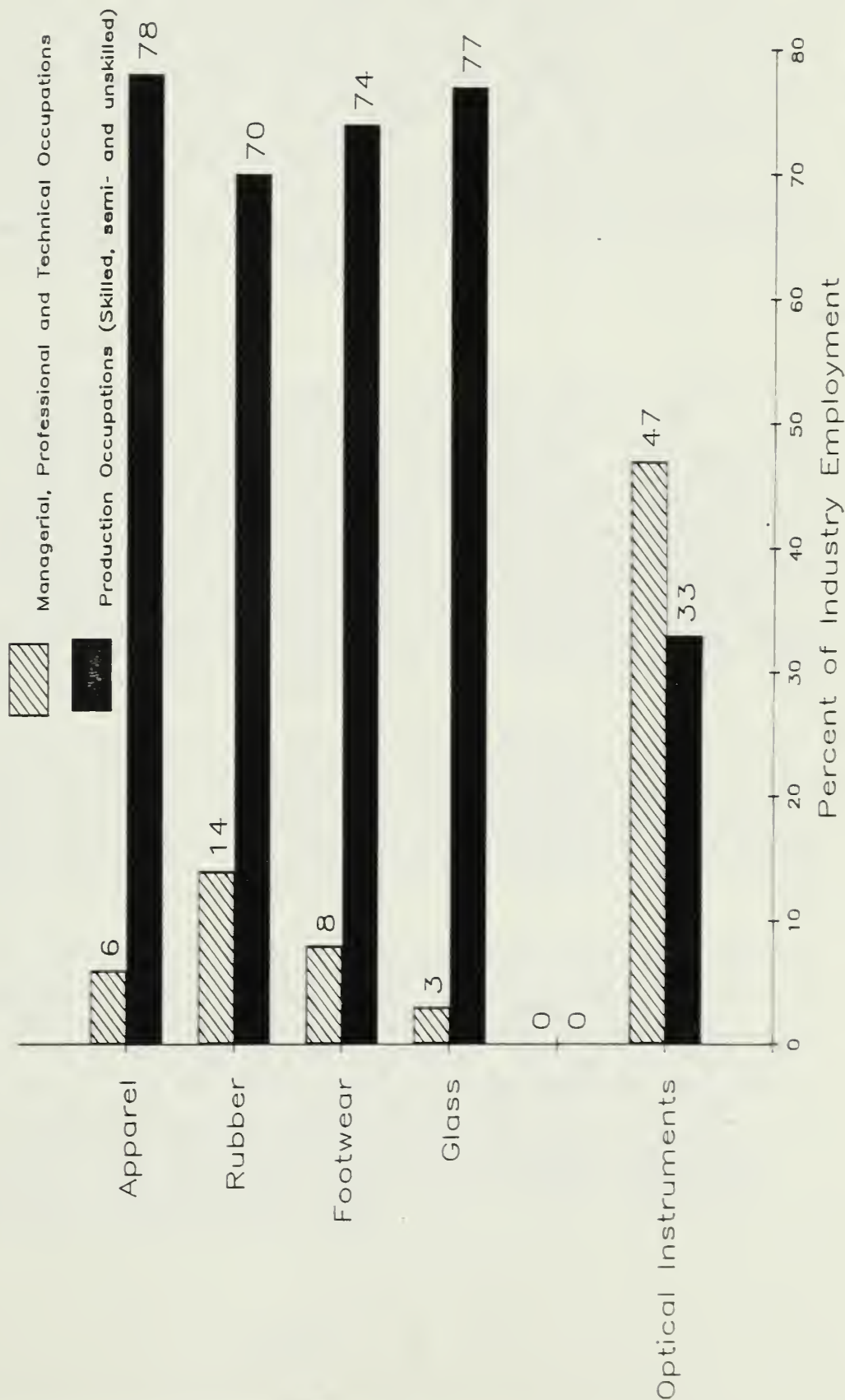
# Occupational Shifts in Milford Manufacturing 1981-1985



Source: Estimated from data in 1980 U.S. Census and DES, Occupational Employment Statistics survey and ES-202 reports.



# Occupational Profiles of Major Milford Manufacturing Industries



Source: 1980 U.S. Census





sample of nine of these firms from the manufacturing, service, and trade sectors. Together, the sample companies accounted for over 60% of the increase in the town's employment of almost 3,200 over the 1981-1985 period.

Managers from these firms were interviewed in June and July of 1986. At the time of the interviews, two of the firms employed at least 1,000 workers, while each of the others had fewer than 200 employees. Four of the six new firms are in manufacturing--two in capital goods and two in non-durables. The two remaining new firms are service-oriented: One caters to business, while the other serves both business and consumers. Of the three established companies, the first produces durable goods, the second is a service provider, and the third is a retailer. Three of the nine sample firms can be classified as "high technology" firms according to DES criteria. While each of the firms was interviewed because it was a new or established growing company during the 1981-1985 period, some of these firms have reduced employment through layoffs, transfers, or attrition and further job reductions are possible in the future.

## 1. The Changing Occupational Profile

Managerial, professional and technical jobs represented slightly more than one-half of employment in the sample firms, while blue collar production and service jobs accounted for only one-quarter. The large share of professional and technical jobs is partly due to the fact that some of the firms are in specialized trade and service industries. However, the occupational profile of new manufacturing firms also differed markedly from that of the town's traditional manufacturers. Production and service jobs comprised over three-quarters of the employment in the apparel, footwear, rubber, glass, and metal forgings industries, while less than 10% of the jobs required professional qualifications.<sup>12</sup> In the new manufacturing firms in the sample, only one-third of employment is in blue collar jobs, while over 40% is in the professional occupations.<sup>13</sup>

Comparable statewide data are not available. However, this shift in the occupational structure mirrors the ongoing transformation of the employment profile at the national level. In the late 1970's the number of blue collar workers nationally exceeded those in managerial, professional, and technical jobs by more than 30%. By 1986 the simultaneous growth of the service sector and the decline in manufacturing had caused a major shift in jobs that narrowed the difference to only 2%.<sup>14</sup>

Few of the firms provided detailed wage and salary data; as a result, little can be said of the incomes the new jobs have generated. The high proportion of managerial and professional jobs--more than 40% of the approximately 2,500 jobs in these firms, as of mid-1986--is consistent with a large number of relatively high-income positions.<sup>15</sup> At the same time, however, almost half of the employment was in what are generally considered to be low-paying production, clerical and service jobs.<sup>16</sup> While little is known about the technology and employment plans of additional new firms planning to locate in town, the manager of one incoming high tech company did indicate that more than 80% of the firm's initial Milford employment will be in managerial and professional jobs.



This occupational structure suggests that "middle level" jobs within individual firms (and potentially within the local labor market) are limited. Such positions require training but not usually a college degree, and may also require previous work experience in the firm. They are important as a means of advancement for workers in lower level jobs who are able and willing to upgrade their skills to improve their earnings. If these types of jobs diminish in importance, intra-firm worker mobility may be limited.

The types of firms which are expected to locate in Milford in the near future may reinforce the town's bifurcated occupational profile. These companies include a large computer R&D facility with a high concentration of professional personnel, as well as a new hotel, a chain supermarket, a small electronics distribution center, and a department store, which likely will have a high proportion of entry-level service jobs. However, other incoming firms, such as an electrical systems product plant and a manufacturer of circuits for electronics, may create technical and other middle-level jobs, as well as a large proportion of assembly jobs, depending on their production technologies.

## 2. Employment of Milford Residents

Managers of the firms studied were unable to determine the extent to which Milford residents had filled the jobs that were created by their companies during the 1980's. They were able, however, to estimate Milford residents as a share of their work forces as of July, 1986. For the sample firms as a whole, the proportion was approximately 25%, while the figure for the new firms alone was roughly one-fifth. For new firms that were under Chapter 121A tax agreements, the overall share was also around 20%. All but two of the new firms were located elsewhere before shifting or expanding to Milford, and Milford residents may have been among the employees transferred from other facilities. Thus, the 1986 figures cannot be used to gauge the number of Milfordians who were hired by these firms during the period of analysis.

The study found three basic reasons that may account for these fairly low proportions: a skill or qualifications mismatch between company employment needs and the skills of the local labor force; the transfer of large numbers of employees from existing facilities; and, in recent years, a tightened local labor market.

The large share of managerial and professional employment in many of the new firms has increased the number of professional jobs in Milford. (To the extent that these jobs have gone to Milford residents, this may have contributed to the rising per capita income reported below.) However, these jobs for the most part required specialized technical expertise, which was not always available in Milford. For example, more than 40% of one firm's staff were engineers, technicians and computer professionals. To hire people with these qualifications, managers could not limit recruitment to the Milford labor market. In fact, two of the high tech firms recruited nationwide for these jobs, while management in four incoming firms looked to all of eastern New England to fill their higher-paying positions. Only one firm, with a small number of professional positions, considered a more geographically restricted labor market to be adequate.





The relatively minor reliance on the town's labor force was thus due in part to a mismatch between skill requirements and availability. This was not necessarily limited to managerial and professional positions. Although managers in three firms reported that they had been able to fill lesser-skilled production, clerical, and service jobs from Milford and adjacent towns, a few managers reported that they had experienced difficulty in hiring local workers for these jobs. A lack of basic skills and workers' limited attachment to these jobs were among the reasons cited.

In any case, as discussed previously, the desire to gain access to the local labor supply did not play an important role in firms' decisions to locate in Milford. Three of the incoming firms came to the town to relocate existing establishments. Employees transferred from these facilities filled most of the jobs established in Milford. While exact figures are not available, approximately 40% of the employment created by new firms in the sample was comprised of transferees. In the case of another major firm planning to locate in Milford, approximately two-thirds of the jobs created locally will be filled by transferred employees. When these firms had vacancies, managers preferred to hire locally if the necessary skills were available. However, none of the nine firms in the survey had a formal policy concerning local hiring, although two firms had agreed to make a "good faith" effort to hire Milford residents under their Chapter 121A tax agreements.

The decline in unemployment in Milford during the 1980's, which is discussed later, has been an additional constraint on local hiring of semi- and unskilled labor. In part, the fall in the unemployment rate can be attributed to incoming firms and to the growth of established companies; it may also be linked to increased employment of Milfordians outside of the town. Managers have attempted to adjust to a tightening local labor market and a resulting increase in labor turnover by extending the region from which they recruit these workers, raising wages, and/or targeting new populations to insure an adequate labor supply. For example, four firms widened their search for workers to a 15 to 25 mile radius from Milford, while some of the larger retail stores and chain restaurants have reportedly raised their wages and/or expanded their benefits packages (and adjusted their working hours) to attract and retain local workers. This latter strategy might not be viable for small retail shops that are less able to pay higher wages. Many of these are new shops that have located in recently-built shopping malls where high rents represent a large drain on initial revenues.

Managers mentioned additional strategies under consideration. In two cases they planned to try to attract retired people back into work. Another manager was considering the possibility of busing workers from urban areas, while a fourth suggested that the company could transfer production out of Milford to another of its plants.



### 3. Training and Opportunities for Advancement

During the company interviews, managers were asked about work force training opportunities because training was seen as a vital link to improved job prospects for low-wage workers. The firms reported a wide range of training policies.

The smaller firms and the relatively autonomous companies in large chains seemed to rely mainly on training their existing work force to meet emerging skill needs. The training was predominantly on-the-job instruction from a supervisor. In at least two firms the training of employees for internal promotion was an important way of meeting the firms' labor needs at many levels, including supervisory and managerial positions. In the large corporations in the sample, however, management policy did not rely as heavily on upgrading or training to get workers with the necessary skills or experience. Cost and time considerations were the major reasons. For one high tech firm which needed highly specialized technical personnel, management preferred to hire experienced candidates rather than investing the time and resources to train existing personnel. Another firm filled vacant positions quickly by transferring personnel from other sites within the corporation.

In spite of those differences, one policy that most of the companies shared was tuition reimbursement. Five of the firms provide financial aid for enrollment in night courses that have some relevance to an employee's career within the company.

### 4. Employment Outlook in the Sample Firms

Although the new and growing firms created a large number of jobs since 1981, substantial growth in these firms is not expected. In fact, some of the jobs created by these firms had already been eliminated by layoffs or attrition by 1985. Faced with severe competition in international markets, two of the new firms together laid off a total of 300 workers and transferred more than 250 other employees out of Milford, relocating them out of state to be nearer their customers or to join other corporate operations. In 1986, one of those firms had another layoff, eliminating 50 jobs, and two additional firms lost almost 50 jobs through attrition. Employment was also not stable in both of the longer-established companies, one of which lost approximately 95 jobs during the 1981-1985 period through layoffs, attrition, transfers and early retirement.

Managers in the six new firms surveyed expected to create few additional jobs over the next three to five years. Three of the firms had no plans to expand employment in the near future: managers in these firms expected to respond to any growth in demand by increasing productivity. In a fourth firm, while some increase in production jobs is possible, expanded capacity may be achieved by acquisition of other facilities. Only two firms have plans to create additional jobs locally. Each is a manufacturing company with fewer than 200 employees. A manager in one of these firms, citing significant product sales growth, expected employment growth of 25%-30% per annum.





Among all the firms contacted, the larger established employers seemed least likely to create many new jobs. The manager of only one established firm forecast any employment growth (6% per annum), implying an expansion of production, technical and professional jobs. Employment contraction is expected in one firm over the next five years; the remaining two companies expect employment to remain fairly constant.

### Dislocated Workers

The shift in Milford's industrial base raises questions about the ability of workers displaced from declining manufacturing industries to find new jobs at comparable wages in growing firms, particularly outside of manufacturing. This section will examine the post-layoff experience of a specific group of displaced Milford workers--those who were laid off in 1985 from Foster Forbes, a glass bottle producer; Anthony Roberts, a manufacturer of raincoats, which closed during the year; and Dennison Computer Supplies, a producer of computer diskettes. The discussion relies primarily on the records of the Milford II Emergency Assistance Center (EAC) set up in 1985 to assist in the reemployment of these workers. While an EAC was established to assist workers laid off from Milford Shoe, which closed early that year, the available data pertaining to these workers are limited.

The Milford II EAC records, which follow workers' reemployment experiences through August, 1986, account for 255 workers, or about three-quarters of the workers reported to DES as laid off from these three companies from July 1985, through June, 1986.<sup>17</sup> It should be noted that these 255 workers represent almost one-third of the 815 workers reported to DES as laid off by Milford firms since 1983.<sup>18</sup> The remaining 560 workers may have found jobs without EAC assistance, may still be seeking employment, or may have left the labor market.

Given these limitations, the data nonetheless provide a sense of the experiences of dislocated workers from three different industries: two firms are from declining or stagnant industries (apparel and glass) and one firm is in the computer supplies market. The records provide some evidence of the kinds of adjustments dislocated workers have had to make in seeking new jobs in a changing local economy.

The three firms hired from different segments of the labor market. Approximately one-third of the EAC group was from Foster Forbes. Most of the Foster Forbes workers, who were predominantly men, were employed in unskilled and semi-skilled production jobs as, for example, selectors or packers. The average wages for these workers was \$9.00 per hour. Anthony Roberts had employed almost 40% of the EAC workers. Its employees, almost all of whom worked as semi-skilled sewing machine operators or in related jobs, were mostly Portuguese women. Wages averaged \$6.90 per hour, but could vary under a piece rate system. Finally, the the Dennison workers, who accounted for about one-quarter of all workers at the EAC, were younger than those of the other two firms and mostly female. Most of these workers were employed in semi-skilled production jobs (e.g., as disc processors or packers) paying an average of \$6.25 per hour.



## 1. The Extent of Reemployment

More than 65% of the 255 workers who sought EAC assistance had found jobs by the end of August, 1986.<sup>19</sup> The reemployment rates of participants from these three firms differed markedly: only one-half of those from Anthony Roberts had found jobs, while the reemployment rates for Dennison (almost 75%) and Foster Forbes (83%) were much higher.<sup>20</sup> Just over one-quarter of the sample group had enrolled in occupational and/or remedial education (e.g., GED) since the EAC opened. Almost all of these workers had completed their training before the end of August. Though precise data were not available, it is known that many of these people subsequently found jobs during the period of study. Thirteen percent (34) of the EAC workers had ended their participation in the EAC before finding new employment. Unfortunately, there is little data to explain their reasons for leaving. About one-fifth of the group (53) was still seeking employment.

Another important question is the extent to which workers displaced from these three firms and from Milford Shoe dropped out of the labor force. Although EAC data do not shed much light on this issue, a DES study based on a sample of 22 Milford Shoe workers (roughly 10% of the total laid off) indicates that about 30% had dropped out of the labor force. By contrast, in a sample of 77 workers from the Milford II EAC, there were no labor force drop-outs from Dennison or Foster Forbes.

These findings are consistent both with anecdotal information and with what might be expected in light of the demographic composition of each of the firms. EAC and DES representatives estimated that more than 30 Anthony Roberts workers had left the labor market, perhaps either because they were discouraged about their reemployment prospects or because they were near retirement age or were members of households with multiple income earners. These same sources suggested that a number of Milford Shoe workers had also left the labor force. Many of the workers at both firms were older women with limited proficiency in English; indeed, over one-half of Milford Shoe workers were over 50, while approximately 60% of the Anthony Roberts employees were over 45 years of age.<sup>21</sup> In comparison, few if any workers from Foster Forbes or Dennison, according to the EAC and DES representatives, had withdrawn from the labor force. Employees of these firms were on average much younger and quite likely were primary wage earners: almost three-quarters of the Foster Forbes work force was under 40 years of age, while 40% of Dennison employees were under 25.

Although the data reveal very little about the length of unemployment these workers experienced, they do indicate that 30 people (12%) were "long-term unemployed" (i.e., unemployed at least 15 weeks) when they first registered at the EAC. Surprisingly, two-thirds of these workers were from Dennison. Because they had worked in a computer-related industry, they might have been expected to make a relatively smooth transition to new jobs in high tech firms. However, only nine of the 43 workers from Dennison were reemployed in high tech industries and several of these (e.g., electronics technicians and managers) were highly trained.

It is particularly difficult to assess the reemployment experiences of Foster Forbes workers. By the end of August, 1986, all laid-off employees who had not taken other jobs were recalled as the company's fortunes improved. However, as late as July, 40% of the EAC participants from the





firm had not found permanent new employment. The situation for these workers was complicated by the fact that many apparently expected to be recalled. The first layoffs were in 1985, but Foster Forbes recalled a few workers almost immediately to fill in for employees who were temporarily absent due to vacations, illness, and the like. In the spring of that year, a temporary contract allowed the firm to recall all available workers for a short period. Thus, the possibility of recall and the difficulty of finding high-wage jobs requiring only limited skills may have discouraged Foster Forbes workers from actively seeking new jobs.

## 2. Shifts to Different Industries

In seeking new employment opportunities, few workers had the option of becoming reemployed locally in their former industry. With the closing of Anthony Roberts, the town's apparel industry was eliminated and Foster Forbes is the only glass producer in the region. Dennison was also the only diskette production facility in the area. Thus, almost all of these workers had to change industries to find a job.

The companies newly located in Milford might be considered the most likely sources of jobs for local people. However, most of these displaced workers did not find employment in these firms. In fact, over 85% of the 131 EAC workers for whom detailed reemployment information is available took jobs outside of Milford. Moreover, one-half of those who were reemployed found jobs in industries such as non-electrical machinery and fabricated metal which have not registered significant growth or which are declining statewide. These industries may not be characterized by stability of employment. This experience was particularly common for workers from Anthony Roberts and Foster Forbes, who found jobs in other traditional manufacturing industries. According to an EAC representative, most of these workers did not express interest in jobs at non-manufacturing firms. In contrast, almost three-quarters of reemployed Dennison workers found jobs in growing industries. As most of these workers had worked for a much shorter time in manufacturing, their attachment to this sector was perhaps less than that of Anthony Roberts and Foster Forbes employees.

The access of Anthony Roberts workers to jobs in growing industries was probably also limited by factors such as language, education, transportation, and age.<sup>22</sup> In general, this was not true for Dennison and Foster Forbes workers. Approximately 40% of the Anthony Roberts work force spoke Portuguese or Italian as their first language; many were not fluent in English at the time of the layoff. Moreover, over 60% of the apparel workers did not complete high school. However, only about 15% of the EAC participants enrolled in some sort of remedial training--either English literacy or high school equivalency courses--according to EAC records, suggesting that many of these workers were ill-equipped to take jobs that required proficiency in English or basic skills, qualifications for many jobs in the trade and service industries as well as in much of manufacturing. As an illustration of deficiencies in English or basic skills, the EAC in some cases directly assisted workers in filling out applications and negotiating job interviews.

In addition, the job search of many of these workers was probably limited to the immediate area by lack of transportation. It was reported that many workers either did not drive or lacked access to a car. Moreover, Milford has no in-town public transportation. These restrictions



significantly inhibit job search in the local retail and service sectors, as these types of firms are predominantly in shopping plazas on the outskirts of town.

Finally, age may have been another barrier to reemployment in growing industries for many Anthony Roberts workers; as more than 60% were over 45 years old. Potential employers might have considered this a drawback.

Although detailed data on the post-layoff experience of Milford Shoe workers are not available, their age, education and language profile was very similar to that of Anthony Roberts. Thus, the more than 250 displaced workers from Milford Shoe were also likely to have had serious reemployment problems. Some of these workers were reemployed in other traditional manufacturing industries, and were subsequently laid off. A number of Milford Shoe workers, for example, found employment in Anthony Roberts and Marlborough Footwear, both of which closed only a few months later.

### 3. Training

Displaced workers who registered at an EAC had a variety of retraining and educational opportunities. The Career Development Center (CDC) in Hopedale, in conjunction with the EACs, arranged or offered courses in drafting, machining, electronics assembly, and secretarial and nurse's aid skills. However, it is estimated that fewer than 20% of the workers enrolled in these courses--a rather low participation rate given that the overwhelming majority were semi- and unskilled and from industries that were declining or stagnating in the region. Remedial tutorials in English literacy and basic skills leading to a GED were also organized, but the EAC recorded only 21 people (8%) taking these courses. The disparity between apparent need and utilization of these programs was particularly marked in the group of workers from Anthony Roberts: although more than 60% had not completed high school and more than 40% had English-language difficulties, less than one-fifth of these workers had taken remedial courses. The low participation rate in these courses is also puzzling, considering that language and education may be significant barriers to reemployment in growing industries. One possible explanation was offered by a DES representative, who suggested that family pressures may have discouraged some women workers from taking advantage of education and training options.

### 4. Employment in New Milford Firms

Of those workers from the Milford II EAC who did find jobs in growing industries, only 6% were hired by the major new employers, according to EAC records. Interviews with managers of these companies also suggested that few workers displaced from Milford's manufacturing sector have found jobs in these new firms. The explanation in part lies in a mismatch between the skills of these workers and the needs of the new employers, as well as in the fact that some firms transferred much of their existing work forces from other locations. Thus, as discussed in the concluding section of this report--"Summary and Policy Implications"--if a principle goal of a community strategy of attracting "outside" firms is the creation of job opportunities for local residents, careful attention must be paid to matching the labor requirements of potential new companies to the skills and





other characteristics of the local labor force. Moreover, policy makers must determine if such firms are likely to undertake new hiring.

## 5. Wages

While the growing industries have created employment opportunities for displaced workers, over half of those in the sample who found jobs in these industries work in sectors where below-average weekly wages prevail nationally.<sup>23</sup> A large proportion of people who had worked in the apparel industry, historically a low-paying sector, were reemployed in other low-paying industries. Almost 60% were hired into those retail and service industries (e.g., small shops or providers of personal services) where poorly-paid and part-time jobs predominate. In fact, over three-quarters of workers reemployed in retailing and services found jobs in relatively small firms which may find it difficult to offer good wages and benefits. On the other hand,<sup>24</sup> almost 75% of Foster Forbes employees, who had been relatively well-paid, found jobs in industries paying above-average wages.

However, a majority of the workers for whom data are available experienced wage skidding upon becoming reemployed.<sup>25,26</sup> Over one-half of the workers from the EAC who had become reemployed found jobs paying no more than 85% of their pre-layoff weekly wages. Earnings loss was most common among the low-paid workers in the group: approximately 60% of the former Anthony Roberts and Dennison employees found jobs at 85% or less of their previous earnings. As indicated previously, pre-layoff hourly wages for these workers averaged \$6.90 and \$6.25, respectively. By contrast, over one-third of Foster Forbes workers, who had earned an average of \$9.00 per hour, at least maintained their pre-layoff earnings. In fact, most of them gained significant increases.

Extremely limited data from the Milford Shoe EAC suggest similar results for low-wage workers at this firm. Half of the participants from this EAC who reported finding new jobs also reported wages ~~no~~<sup>27</sup> more than 85% of their previous earnings, which averaged \$5.45 per hour. Some workers reportedly found higher-wage jobs that paid an average of approximately \$5.60 per hour.

In summary, if the experiences of workers from the two Milford EACs is any indication, the town's displaced workers have faced a difficult adjustment to Milford's transition. More than two-thirds of the EAC workers found new jobs, but they faced a variety of reemployment barriers, including limited skill transferability, inadequate formal education, and poor English. When these workers found new jobs, they often had to accept reductions in weekly earnings. Such "wage skidding" was most common among the predominantly low-paid workers from Anthony Roberts and Dennison.

In spite of the existence of reemployment barriers, less than one-fifth of the workers from the EACs participated in vocational training programs that were available locally. Moreover, only a small share of the many workers with English language difficulties or limited education enrolled in available remedial classes. This highlights the importance of counseling and other services which can encourage workers to participate in these kinds of training.



## Milford Residents

The study thus far has focused on the consequences of Milford's transition for workers employed in the town's business firms. Also of interest is the effects of the process on the residents of the community.

### Labor Force

What impact has the growth of employment from 1981 to 1985 of 3,194 jobs had on the Milford labor force? Has the expansion of job opportunities benefitted Milfordians, or have the main beneficiaries been residents of other localities who commute into the town?

As noted previously, in an effort to address this issue, major new employers (which located in Milford during the 1980's) and a sample of established growing firms in trade, services, and durable goods manufacturing were asked to estimate what share of their employment growth from 1981 to 1985 was comprised of Milford residents. Unfortunately, the information could not be provided. Therefore, the question must be approached indirectly, through an analysis of labor force data (Exhibit 17).

The data illustrate trends in the employment, unemployment, and unemployment rates of Milford residents. Due to changes in the method of calculating city and town employment and unemployment, a series for these variables can be shown for the period 1983 to 1985 only. It is possible, however, to calculate rates of change in employment and unemployment from 1981. On the other hand, unemployment rates do not differ significantly under the old and new methods of calculation; hence, a 1981-1985 series is given.

Although this is not indicated in Exhibit 17, employment of Milford residents increased by an annual rate of 9% between 1981 and 1985. The unemployment rate fell by over 6 percentage points, from 10.4% to 4.2%. In comparison, employment of Massachusetts residents rose by 2% annually, while the unemployment rate fell 2.5 percentage points, from 6.4% to 3.9%. Moreover, the more rapid decline in Milford's unemployment rate cannot be explained by slow labor force growth; on the contrary, while the state's labor force grew at an annual rate of 1%, Milford's labor force rose at an 8% annual rate. Since the rate (and level) of unemployment increased from 1981 to 1982 due to the state recession, the performance since the business cycle trough of 1982 is even more impressive.

The improvement in Milford's labor force picture relative to the state's suggests that the town's employment and unemployment performance has not resulted merely from the upswing in the business cycle since 1982 and the growth in the state economy overall. The difficult task is to determine to what extent these trends resulted from economic growth in Milford per se as opposed to regional expansion leading to more jobs for Milford residents employed outside the town. It has previously been noted that, according to the 1980 Census, in 1979 approximately two-thirds of Milfordians worked in other cities or towns. However, it cannot be assumed that this proportion remained fairly constant throughout the 1980's, especially in light of a population in-migration that, according to local officials, has taken place. Place-of-work data on these in-migrants are not available. Thus, it is impossible to come to any definitive conclusions on this issue.



# Exhibit 17

## Employment and Unemployment, 1981-1985

<u>Year</u>	<u>Labor Force</u>	<u>Employment</u>	<u>Unemployment</u>	<u>Unemployment Rate</u>	
				<u>Milford</u>	<u>Massachusetts</u>
1981	N/A	N/A	N/A	10.4	6.4
1982	N/A	N/A	N/A	11.2	7.9
1983	12,199	11,310	889	7.3	6.9
1984	12,641	11,995	646	5.1	4.8
1985	12,647	12,111	536	4.2	3.9

Source: Division of Employment Security,  
Labor Area Unemployment Statistics





## Income

Exhibit 18 compares the growth in Milford and state per capita income from 1981 to 1983, the latest year for which data are available. As the figures indicate, the town performed about as well as the state, as resident real per capita income increased by 5% (\$485 in 1985 dollars) while that of the state rose by 6%, or \$680. In part, this may be due to the fact, noted earlier, that the average real wages of Milford and Massachusetts full-time workers rose at similar rates. As is the case with employment trends, however, trends in per capita income are significantly influenced by regional, as well as local, developments. Again, the difficulty lies in separating the two.

## Housing

The growth in population, employment, and income that has accompanied Milford's economic transition has increased the demand for housing, which has led to both a rapid rise in prices and rents and a construction boom. Approximately 60% of Milford's housing stock is owner-occupied; of the 40% that is rental housing, one-tenth is publicly-owned or subsidized. Because of a moratorium on the construction of new multiple-family apartment buildings in effect since 1972, construction has been limited to owner-occupied dwellings.

From 1981 to 1985, Milford's housing stock increased by an estimated 570 units, or 7%. Almost all of the growth has taken place since 1983. In a 1985 study of housing starts from 1980 through 1984, Milford ranked 79th out of the 257 Massachusetts cities and towns examined by the Cape Cod Regional Planning and Economic Development Commission.

Regarding trends in housing prices and rents, local data are unfortunately not available in summary form. Hence, it is necessary to rely on assessed values as a proxy for prices as well as anecdotal information received from town realtors and local officials.

According to Milford assessment data, the assessed value of an average owner-occupied housing unit rose 31% from 1981 to 1985. During the same period, the assessed value of an average Massachusetts residential dwelling increased by 148%. In contrast to what the assessment data suggest about price trends, however, local realtors and town officials estimate that Milford housing prices have doubled during the 1980's, with the largest increase occurring since 1984. These same sources estimate that rents have also doubled during the 1980's.

Milford's housing boom raises two key issues. First, has the apparent doubling of rents led to the displacement of tenants? And second, has the new housing construction been aimed at any particular income groups?





# Exhibit 18

Per Capita Income, 1981-1983, in 1985 Dollars

	<u>1981</u>	<u>1983</u>	<u>Percent Change 1981-1983</u>
Milford	\$10,384	\$10,852	+5%
Massachusetts	10,869	11,532	+6

Source: Center for Massachusetts Data, Executive Office of Communities and Development; and U.S. Census Bureau, Series P26, Local Population Estimates.



In the opinion of local officials, displacement is not occurring. Even if this perception is accurate, however, the fact that the rise in rents has far outstripped the growth in per capita income implies that tenants have had to devote an ever-increasing share of their income to housing. Hence, the housing boom may well have led to financial hardship for some tenants, particularly those toward the bottom end of the income scale. With respect to the second issue, these same officials stated that most of the new housing has been oriented toward upper-middle income people who have come to Milford to take jobs with new and growing firms, and are priced accordingly. This suggests that the access of middle-and lower-income Milfordians to new housing has been limited.



## SUMMARY OF FINDINGS AND POLICY IMPLICATIONS

Up to this point, the report has outlined the transition in Milford's economic base that has taken place during the 1980's as well as some of the major consequences of the transition for Milford workers and residents. This concluding section summarizes those findings and seeks to draw implications from the Milford experience for other communities in the midst of structural economic change.

### Summary of Findings

1. During the 1980's, the distribution of employment in Milford has undergone a two-fold shift: 1) from manufacturing to trade and services, and 2) within the manufacturing sector, from non-durable to durable goods. The period has also been marked by rapid job growth. A small number of firms--many of them new to Milford--have played a crucial role both in the process of industrial transition and in the overall expansion of employment. Companies in "high technology" industries have accounted for more than one-third of the increase in jobs. Indeed, high tech firms will have a growing presence in the town over the next year; at least three additional companies from high tech industries are coming to Milford. One firm plans to employ a minimum of 500 workers; the two others project employment of at least 350 and 50; respectively.

2. The growth of new firms has been influenced by Milford's location near Rt. 495 as well as local public policies and initiatives. Among the latter, the most important include a) the development of a cooperative relationship with incoming companies, b) the provision of essential infrastructure, and c) the offer of Chapter 121A tax agreements.

3. The major consequences of the transition include the following:

1) The overall structure of occupations in Milford firms has shifted: the share of production jobs has fallen, while the proportion of clerical and service jobs, on the one hand, and managerial, technical, and professional positions, on the other, has increased.

2) Full-time real wages of workers in these firms have increased at approximately the same rate as state real wages. However, the gap between Milford's lowest- and highest-paying sectors has apparently widened, as sectoral wages have increased at widely differing rates.

3) Most of the net employment growth during the 1980's can be attributed to incoming firms and to a few large, existing companies. In a sample of nine of these firms, which accounted for more than 60% of the growth in employment, over half of the jobs are in the managerial and professional categories, while only about one-quarter are in "blue collar" production and service jobs. This structure of occupations contrasts with the occupational profile of the town's declining non-durable manufacturing industries, which historically were a key component of the town's economic base. Production jobs dominated these industries.



4) Most of the sample firms were unable to provide detailed wage information. However, the occupational distribution within these companies is consistent with large shares of both high- and low-paying jobs, and thus a relatively small number of middle-income employment opportunities.

5) The sample firms draw upon a regional labor market, in part because the skills and experience of the Milford labor force do not always match the requirements of the firms. Moreover, many of the workers have been transferred from other company locations, and firms face a tightening local labor market. Hence, only approximately one-quarter of the employees of these firms are Milford residents.

6) Policies toward training and internal upgrading to fill new jobs differed widely among the firms studied. In general, smaller and relatively independent companies tended to rely more on the training of their existing work forces and internal promotion than was the case with large corporations.

7) Employment in some of these companies has not been stable. Two of the new firms taken together laid off or transferred over 500 workers in the 1981-1985 period; these and other firms have lost some additional jobs since that time. Employment in one of the long-established firms fell by almost 100 during the period due to a variety of factors. Moreover, the firms in the sample expect to create few additional job opportunities over the next few years.

8) According to data from the Milford II Emergency Assistance Center, which served workers laid off from three firms, a number of dislocated workers have yet to become reemployed. Of those who have found new employment, many have had to change industries and accept wage reductions. In addition, most of the workers have found employment outside of the town. Few of these workers have obtained new jobs with the new firms or established major growing companies.

9) Employment of Milford residents has increased rapidly, and there has been an appreciable decline in unemployment. As a result, the unemployment rate has fallen faster than that of the state. These developments can be attributed to economic growth both in Milford and the region.

10) Per capita income in real terms rose about as fast as Massachusetts per capita income from 1981 to 1983, the latest year for which data were available. As is true for employment and unemployment, it appears that this was due to economic growth both in Milford and the broader region.

11) A boom in housing construction, accompanied by a steep rise in rents and housing prices, has been a by-product of the transition. Although, according to local officials, displacement of existing tenants has not occurred to a notable extent, rents have risen much faster than the town's per capita income, which has probably had the most serious impact on low-income renters. Most of the new construction has been geared toward middle- and upper-income buyers.





## Policy Implications

The character and results of Milford's economic transition summarized above raise a number of issues that may be relevant to policy makers in other communities that are undergoing industrial change. Among the most important are: 1) the regional context of economic growth; 2) strategies to expand the employment of local residents by attracting firms from outside the community; 3) the special problems of dislocated workers; 4) the risks of over-reliance on a few industries and/or firms; and 5) the tailoring of local development and employment strategies to local conditions. These issues are addressed in the following paragraphs.

1. Local economies that are integrated into larger regions are strongly influenced by regional economic trends. In the case of Milford, roughly two-thirds of the town's residents were employed outside of the town in 1980, and therefore the local labor force (as opposed to work force) is to an important extent dependent on "external" employment opportunities. Indeed, in most of the cities and town throughout the Commonwealth, people may not work in their community of residence. This economic interdependence among communities requires regional policies, perhaps including coordination among local policy makers within a given region.

2. A strategy of attracting firms from the "outside" in part to create jobs for local residents may meet with only limited success. In Milford's case, only about 20% of the jobs in the major incoming firms are held by Milford residents. In part, this has been due to the fact that some firms transferred much of their existing work forces from other locations. In other cases, there was a mismatch between the skills of the local labor force and the skill requirements of employers, which required firms to hire from a wide labor market. This suggests that policy makers who choose this strategy must take care to pursue firms that are likely to undertake new hiring and that offer new job opportunities for which residents are qualified. The latter point is particularly relevant if the goal is to reemploy long-time workers who have been displaced from traditional industries and whose skills may be industry- or even firm-specific and thus not easily transferrable to other industries and occupations.

3. The issue of displaced workers also highlights the importance of worker assistance such as training and counseling. As the section on worker dislocation showed, the efforts of many workers from "mature" Milford manufacturing industries to find comparable new jobs may have been hindered by factors such as inadequate proficiency in English, limited formal education, or skills that were not transferrable to growing industries. According to the EAC, moreover, some of these workers did not even consider the possibility of reemployment in growing industries because of their long-standing ties to traditional industries. Thus, if displaced workers are to be reabsorbed into growing industries which offer better opportunities for stable employment, workers must continue to have access to training in both basic and specific skills as well as to counseling and other services which can encourage workers to broaden their job search.



4. In pursuing a local job creation strategy, the reliance on a limited number of industries and/or firms may leave a community vulnerable both to fluctuations in a few key industries and to decisions made by a handful of companies regarding production, employment, and location. The former point is illustrated by the fact that roughly one-third of the employment created by new firms was dependent on the health of the state's computer industry. Even that industry is not impervious to business downturns, as the 1985 computer slump showed. Indeed, the discontinuation of computer diskette manufacturing in Milford, which resulted in the layoff of more than 130 workers, was in part the result of the 1985 contraction.

The phasing out of a large part of its Milford operations by a major computer firm is an example of the second issue. This decision, which may have affected 200 to 300 employees, was part of an effort to consolidate a major portion of the company's business in another location. A representative of the firm has indicated that the company may use the available space for another purpose sometime in the future; nonetheless, this case does underline the problem of vulnerability.

Milford officials are aware of the importance of developing a diversified economic base which is not dominated by a small number of employers. One official, concerned that the town had become overly-reliant on high technology companies, was in favor of attracting new firms from a wider range of industries. The town's success in attracting a hotel and a department store to Milford are steps in this direction. On the other hand, the importance of high technology will be reinforced by the entry of Prime Computer, Fenwal Electronics, and the Engelhard Corporation. Prime plans to employ a minimum of 500 workers initially, while Fenwal and Engelhard are expected to employ at least 350 and 50, respectively. The entrance of Prime and Fenwal will also strengthen the role of large firms in the Milford economy.

5. A community that wishes to stimulate local employment growth by attracting firms from other areas must develop a strategy that is tailored to its own particular circumstances. There is no single strategy that can be applied uniformly to cities or towns that differ with respect to location, size and skills of labor force, physical resources, and other characteristics that influence economic development. One essential aspect of any strategy is the acknowledgement that at least some of these factors are not easily affected by local public policy. Milford's location along Rt. 495, for example, was probably the town's single most important attraction, but was obviously not under the control of the town government.

Of those factors that are subject to local control, the Milford experience suggests that the establishment of cooperative relations between local government and company officials is of major importance, as is the availability of essential infrastructure. On the issue of offering inducements such as tax relief to prospective employers, the case studies, supported by academic research, imply that these are only one of a variety of considerations in firms' location decisions. Moreover, cities and towns should be well aware of the kinds and magnitudes of trade-offs, such as forgone revenue, that may be involved.



## APPENDIX

### Types of Jobs in Occupational Categories

<u>Occupational Group</u>	<u>Examples of Jobs</u>
Managerial and related	Executives and managers, personnel specialists, buyers, financial officers
Professional	Engineers, computer systems analysts, physicians, registered nurses, urban planners, lawyers
Technical	Technicians, dental hygienists, computer programmers, LPNs
Sales	Sales representatives, real estate agents, salespeople in retail trade, counter clerks, cashiers
Service	Cooks, waiters, food preparation workers, childcare workers, nursing aides, janitors
Clerical	Receptionists, computer operators, order clerks, payroll clerks, inventory clerks, file clerks
Production	Equipment repairers, machinists, operators, assemblers, laborers

Source: U.S. Census, 1980, Technical Documentation





## NOTE ON DATA SOURCES

This study relies on both published and unpublished data as well as information gathered through confidential interviews with public officials, managers of Milford firms, and a variety of other individuals who have played important roles in the town's transition. The major published sources include DES ES-202 reports, which provide data on employment levels and wages; the Local Area Unemployment Statistics (LAUS) and Occupational Employment Statistics (OES) programs, for labor force and occupational data, respectively; the U.S. Census (demographic and occupational data); the Bureau of Labor Statistics publication Employment and Earnings (wages); and Emergency Assistance Center (EAC) funding proposals and process reports, which give demographic and other data on workers who have been displaced from specific firms. Among the unpublished sources, the most important are EAC worker reemployment logs and DES Mature Industries automated reports, which are the source of almost all of the data on the post-layoff experience of dislocated workers.





## FOOTNOTES

1. The use of a cyclical employment peak removes fluctuations in employment levels (and perhaps shares) that are attributable to movements in the business cycle. The Massachusetts, as opposed to the Milford, peak is used because the market for most Milford firms extends beyond the town.
2. The rubber industry is an exception to this trend of long-run decline. Although employment fell by 50, or 44%, from 1974 to 1981, the industry rebounded during the 1981-1985 period, as the number of jobs increased by 24, or 38%. However, employment in 1985 was still almost one-quarter below its 1974 level.
3. 1974 was the previous state employment peak.
4. On an annual basis. If a year-end calculation were possible, it would show an even steeper decline, as the shoe and apparel firms closed during the year.
5. Division of Employment Security, High Technology's Impact on the Massachusetts Economy Since 1976, November, 1985, p. 6.
6. As discussed in the following section. Indeed, Milford is a logical location for new and expanding high tech firms. Its location on Rt. 495 enables expanding companies to transfer employees without requiring them to move and allows new firms to tap the rich supply of professional and technical labor in the region. High tech firms have congregated along Rt. 495 as they did earlier along Rt. 128. However, crowding and the resulting increase in land prices along the northern half of the corridor have forced firms to look further south and east for new sites.
7. Cf. "The Nature of New Employment" in a later section.
8. Estimated from DES ES-202 data and BLS data. See footnote 10.
9. Data supplied by the Milford planning department.
10. "Wages" are defined as the total compensation received by employees net of employer contributions for old-age, survivors, disability, and health insurance (OASDI), unemployment insurance, workers compensation, and private pensions and welfare funds. Wage data are presented for all employees, including managers.

Full-time wages were estimated by applying BLS national data on full- vs. part-time workers by major industry division. It is assumed that these national proportions hold for Milford.
11. This occupational distribution was developed using statewide data from the Occupational Employment Statistics program and the 1980 U.S. Census. It is assumed that the occupational structure of Milford industries is identical to the occupational profiles of those industries at the state level. This procedure could not be followed, however, in the case of



wholesale trade. The town's wholesale trade sector, which is dominated by a handful of firms, is closely linked to the computer industry; therefore, its occupational structure is significantly different than that of wholesale trade at the state level. Hence, wholesale trade is excluded from the analysis.

12. Calculated from DES Occupational Employment Statistics data and the 1980 U.S. Census.

13. These data refer to the four case study manufacturers which provided occupational information.

14. "Economic Scene: Work-Force Shifts in 80's," New York Times, August 15, 1986.

15. This analysis is based on data from the six firms for which information on occupations was available. These firms accounted for over half of the 1981-1985 employment growth in the town.

16. For the two manufacturing companies that did supply wage data, on the other hand, wages are above the state median for some of these types of jobs as reported in DES, Selected Occupational Wages in Manufacturing, Massachusetts, Volume I, May, 1986.

17. The Milford II EAC had served a total of 274 workers (Milford residents and non-residents) by the time it closed in October, 1986. However, 19 of these workers were from non-Milford firms.

18. Mature Industries Research Dept. data base.

19. This rate includes 16 Foster Forbes workers who were recalled by the firm in late August of 1986.

20. Ten of the 87 Foster Forbes participants initially registered with the EAC but never used any of its services or answered letters or telephone calls from EAC staff. Information on the reemployment experience of these workers is not available. Therefore, if some of them did find new jobs, the 83% figure cited in the text understates the actual reemployment rate for Foster Forbes workers from the EAC.

21. These workers also had limited schooling: 54% of Milford Shoe employees had at most an eighth-grade education, while 61% of the Anthony Roberts workers had not completed high school. Sources: DES Milford Shoe EAC Process Analysis and Mature Industries automated report on Milford II EAC.

22. These factors are addressed in the literature on reemployment of displaced workers. Cf. Paul Flaim and Ellen Sehgal, "Displaced Workers of 1979-83: How Well Have They Fared?", Monthly Labor Review, June, 1985.

23. Data limitations did not allow for the computation of weekly wages by industry at the town, regional, or state levels. However, with few exceptions, industries that pay below-average wages nationally also offer below-average wages in the Commonwealth.



24. Their pay was high relative to other workers in unskilled and semiskilled jobs and in declining industries.

25. Based on EAC reemployment logs with data on 131 workers. Calculations are from pre-EAC program and entered employment data on hourly wages, and BLS national data on average weekly hours by industry.

26. Indeed, at the national level, the absorption of workers displaced from relatively high-paying manufacturing industries into trade and services often results in reductions in hourly as well as weekly earnings. Cf. Barry Bluestone and Bennett Harrison, The Deindustrialization of America (New York: Basic Books, 1982).

27. Calculated from a sample of eight Milford Shoe workers in a follow-up study by the DES Evaluation Dept.







